# Pension systems in 27 EU countries

Poteraj, Jarosław

The Association of Polish Scientists of Lithuania

September 2008

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*To my daughters …*

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**Jarosław Poteraj**

The Association of Polish Scientists of Lithuania
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# PREFACE

The following book is a result of the author's research on pension systems in the Member States of the European Union. The research, taken up in the middle of 2006, started with collecting literature on pension systems and their development in various countries of the world. At the beginning of 2007, the author started preparing articles in Polish devoted to pension systems in particular countries. The first article, on the pension system in Austria, was written in January 2007, whereas the last one, on the pension system in Italy, in February 2008, which prepared the ground for Chapter II of this book. Chapters I and III were written in February and March 2008. At the same time, the articles were being translated from Polish into English. The final shape of the book was created in August 2008, and then, after receiving positive reviews from Professor Szumlicz from the Warsaw School of Economics in Warsaw, Poland, and Professor Rakauskienė from the Mykolas Romeris University in Vilnius, Lithuania, the editorial work in the publishing house began.

The analysis of pension systems in the 27 Member States of the European Union was prepared on the basis of literature studies in both English and Polish[1], including the author's earlier analyses. Apart from books and literature, the analysis was to a large extent based on the Internet resources, as well as on the publications of the governments, supervisory institutions, and institutions managing pension systems in the described countries, prepared in English, as well as in national languages. The author also used the collective analysis of the American Social Security on the solutions applied in the European countries[2], as well as materials published by the European Union[3]. General information on particular countries was prepared on the basis on the Polish *Wielka*

1 The author's mother tongue.

2 *Social Security Programs Throughout the World: Europe, 2006* (2006).

3 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006).

*Encyklopedia PWN* published in 31 volumes between 2001 and 2005[4], completing the statistical data with the most recent information available in 'World Factbook', accessible on the CIA websites[5]. Moreover, the author made use of legal acts concerned with the changes in pensions systems within the last 120 years. Another research method consisted in participant observation as the author is a participant of the Polish pension solutions and has lived in Poland for the last 45 years observing the changes implemented in the Polish pension system.

The author's research objective of cognitive character is to present historical and recent solutions applied in pension systems of the European Union. The objective of applicational character, on the other hand, is to find in those diverse systems ideas which are worth discussing in benchmarking comparisons.

Literature concerned with pension systems in European countries is extremely rich. This area has been analysed by many authors, and the list presented below covers only the best-known authors and publishing houses that published their works in the 21st c. The list does not include the items devoted to only one country, but indicates those which are devoted to system solutions or concern at least two European countries. Other books are enumerated in the Bibliography. The following list also distinguishes between the authors publishing in English and those writing in Polish.

- **year 2001**
  - in English: the World Bank published a document on new pension concepts, edited by Robert Holzmann and Joseph E. Stiglitz[6],
  - in Polish: in Oficyna Ekonomiczna – Dom Wydawniczy ABC publishing house from Cracow – Keith P. Ambachtsheer and Don D. Ezra published a book on pension funds[7];

4 *Wielka Encyklopedia PWN* (2001-2005), vv. 1-31.

5 https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31 March 2008.

6 *New Ideas About Old Age Security: Toward Sustainable Pension Systems in the 21st Century* (2001).

7 Ambachtsheer K. P., Ezra D. D. (2001).

- **year 2002**
  - in English: a document published by the University of Chicago Press edited by Martin Feldstein and Horst Siebert on the reform of social security pensions[8], a book published by Kluwer Law International edited by Ming-Cheng Kuo, Hans F. Zacher and Hou-Sheng Chan on comparison of pension systems of selected countries of the West and East[9], Peter A. Diamond published at the Oxford University Press a book on social security reform[10], and a book published by the publishing house of Edward Elgar edited by Winfried Schmähl and Sabine Horstmann on the transformation of pension systems in Central and Eastern Europe[11];
- **year 2003**
  - in English: a series of four books published by a German publishing house: Gesellschaft für Versicherungswissenschaft und – gestaltung e. V. (GVG) from Berlin on 13 countries applying for the membership in the European Union[12], the World Bank published a book edited by Robert Holzmann, Mitchell Orenstein and Michał Rutkowski on pension reforms in Europe[13], the Oxford University Press published a book on pension insurance in the 21$^{st}$ c.[14] edited by Gordon L. Clark and Noel Whiteside, and the publishing house of Edward Elgar published a book edited by Onorato Castelino and Elsa Fornero on pension policy in the integrating Europe[15] and an individual work of

8 *Social Security Pension Reform in Europe* (2002).
9 *Reform and Perspectives on Social Insurance: Lessons from the East and West* (2002).
10 Diamond P. A. (2002).
11 *Transformation of Pension Systems in Central and Eastern Europe* (2002).
12 *Social Protection in the Candidate Countries. Country Studies Bulgaria, Hungary, Romania, Slovenia* (2003); *Social Protection in the Candidate Countries. Country Studies Cyprus, Malta, Turkey* (2003); *Social Protection in the Candidate Countries. Country Studies Czech Republic, Slovak Republic, Poland* (2003) and *Social Protection in the Candidate Countries. Country Studies Estonia, Latvia, Lithuania* (2003).
13 *Pension Reform in Europe: Process and Progress* (2003).
14 *Pension Security in the 21$^{st}$ Century. Redrawing the Public-Private Debate* (2005). First published 2003. First published in paperback 2005.
15 *Pension Policy in an Integrating Europe* (2003).

Katharina Müller comparing old-age security in Latin America and Eastern Europe[16];

- o in Polish: Marek Góra published a book on pension systems in Polskie Wydawnictwo Ekonomiczne[17];

- **year 2004**
- o in English: a work published by the University of Chicago Press edited by Jonathan Gruber and David A. Wise on social security programmes and retirement around the world[18], the World Bank published a book edited by Alberto R. Musalem and Robert J. Palacios on the management of the public pension funds[19], and the publishing house of Edward Elgar published a book edited by Gerard Hughes and Jim Stewart on reforming pension systems in Europe[20];
- o in Polish: TWIGGER publishing house published the richest collective research so far edited by Tadeusz Szumlicz and Maciej Żukowski on pension systems in the European Union of 15 Member States[21], and in the Publishing House of the University of Łódź Zofia Czajka published a book on pension systems in Germany and Great Britain[22];
- **year 2005**
- o in English: the Oxford University Press published the eighth edition of a comprehensive book by Dan M. McGill, Kyle N. Brown, John J. Haley and Sylvester S. Schieber on the foundations of private pensions[23], Martin Schludi published in the Amsterdam University Press a book on the reform of Bismarck's pension systems in five countries of the Western Europe[24], the publishing house of Edward Elgar published

16 Müller K. (2003a).
17 Góra M. (2003).
18 *Social Security Programs and Retirement around the World. Micro-Estimation* (2004).
19 *Public Pension Fund Management. Governance, Accountability, and Investment Policies* (2004).
20 *Reforming Pensions in Europe. Evolution of Pension Financing and Sources of Retirement Income* (2004).
21 *Systemy emerytalne w krajach Unii Europejskiej* (2004).
22 Czajka Z. (2004).
23 McGill D. M., Brown K. N., Haley J. J., Schieber S. J. (2005).
24 Schludi M. (2005).

a book edited by Elsa Fornero and Paolo Sestito on pension systems in four countries of Western Europe[25], the Oxford University Press published a book edited by Robert L. Clark and Olivia S. Mitchell on reinventing the retirement paradigm[26], the Cambridge University Press published a book edited by Robin Brooks and Assaf Razin on social security reform[27], the publishing house of Edward Elgar published a work edited by Giuliano Bonoli and Toshimitsu Shinkawa on ageing and pension reform in 11 countries[28], and the World Bank published a book prepared by the team headed by Robert Holzmann and Richard Hinz on financial and political issues in international perspective and their reform in the 21st c.[29];

- o in Polish: the Academic Press of the University of Szczecin published a work by Natalia Marska on the functioning of the obligatory pension funds in the world and in Poland[30], and Jakub Wiśniewski in the ASPRA-JR publishing house published a book on the changes in the Swedish and British models of social policy[31];

- **year 2006**
- o in English: two reports of the World Bank – on pension reform and the development of pension systems[32] and on pension reform edited by Robert Holzmann and Edward Palmer[33], George A. (Sandy) Mackenzie published a book on annuity markets and pension reform[34] in the Cambridge University Press, in the publishing house of Phisica-Verlag Birgit Mattil published a book on pension systems in

25 *Pension Systems: Beyond Mandatory Retirement* (2005).
26 *Reinventing the Retirement Paradigm* (2006). Reprint 2006.
27 *Social Security Reform: Financial and Political Issues in International Perspective* (2005).
28 *Ageing and Pension Reform Around the World: Evidence from Eleven Countries* (2005).
29 Holzmann R. and Hinz R. et al. (2005).
30 Marska N. (2005).
31 Wiśniewski J. (2005).
32 *Pension Reform and the Development of Pension Systems: An Evaluation of World Bank Assistance* (2006).
33 *Pension Reform: Issues and Prospect for Non-financial Defined Contribution (NDC) Schemes* (2006).
34 Mackenzie G. A. (Sandy) (2006).

Germany and Great Britain[35], and David Blade published two books in the publishing house of John Wiley & Sons on pension finance and economics[36];

- o in Polish: Maciej Żukowski published a book on pension reforms in Europe[37] in the publishing house of the Academy of Economics in Poznań, whereas Piotr Kurowski published in the Institute of Labour and Social Affairs a book on the development of pension funds in five countries of Eastern Europe[38];

- **year 2007**

- o in English: the Oxford University Press published a manual on pension policies in 16 countries of Western Europe edited by Ellen M. Immergut, Karen M. Anderson and Izabelle Schulze[39], in the publishing house of the World Bank Edward Whitehouse published his work on public pensions in 53 countries all over the world[40], Keith P. Ambachtsheer published in the publishing house of John Wiley & Sons a book on pension revolution[41], the publishing house of the Urban Institute Press published a book edited by Rudolph G. Penner on social security reform in international perspective[42], the publishing house of Edward Elgar published a collective work edited by Traute Meyer, Paul Bridgen and Barbara Riedmüller on the risk of non-state provisions in Europe[43], and the European Commission published a report on social protection and social inclusion in the Member States of the European Union[44],

35 Mattil B. (2006).
36 Blake D. (2006b) and Blake D. (2006a).
37 Żukowski M. (2006).
38 Kurowski P. (2006).
39 *The Handbook of Western European Pension Politics* (2007).
40 Whitehouse E. (2007).
41 Ambachtscheer K. P. (2007).
42 *International Perspectives on Social Security Reform* (2007).
43 *Private Pensions Versus Social Inclusion? Non-State Provision for Citizens at Risk in Europe* (2007).
44 *Joint Report on Social Protection and Social Inclusion 2007. Social Inclusion, Pensions, Healthcare and Long Term Care* (2007).

- **year 2008**
  - o in English: the Oxford University Press published a book edited by Stephen J. Key and Tapen Sinh on pension reforms in American countries[45]. The following book comprises the Introduction, three chapters and the Conclusion. In the **Introduction** the author describes general issues concerned with the development of pension systems in Europe. The contents of **Chapter I** is presentation of system concepts of Bismarck, Beveridge, Friedman-Piñera, the World Bank, and the European Union. **Chapter II** is devoted to pension systems in particular Member States of the European Union. Each country is presented in the following order: 1) General information about the country, 2) Historic development of the pension system, 3) The present state of the pension system[46], and 4) Challenges and planned changes in the pension system. The data concerned with the development and functioning of pension systems in particular countries are included in **Chapter III**. In the **Conclusion** the author refers to research objectives presented in the Introduction and presents his reflections on the development and future of pension systems in the Member States of the European Union.

The person who helped to create the present shape of the book is the author's father – Józef Poteraj – a proofreader of Polish texts. I hope that thanks to the invaluable work of Barbara Adamiak and father Paul Dźwig, the text became better understandable for the readers of English. The author also greatly appreciates the remarks on the content made by the reviewers of the book – Professor Szumlicz and Professor Rakauskienė. The titanic editorial work of Marek Jadczak from Łomża, Poland, as well as the kindness of Professor Jaroslav Volkonovski from the Association of Polish Scientists of Lithuania allowed to give the book its present form. However, despite the author's diligence the readers will undoubtedly come

45 *Lessons from Pension Reform in the Americas* (2008).

46 For the majority of the countries, it is the state as of 1 January 2008. In the case of Cyprus and Malta due to the introduction of the euro on 1 January 2008, the state of the pension system of 31 December 2007 is presented because of the lack of the data in the new currency.

across certain irregularities or debatable elements. The author takes full responsibility for any shortcomings and asks the Readers to send their critical comments to poteraj@neostrada.pl .

# INTRODUCTION

The problem of ageing and becoming unable to support oneself or one's family naturally has always been present in the history of mankind. The ancient Spartans' notorious solution to this problem, i.e. killing elderly infirm men by throwing them off the rock into the sea, or, less notorious but still practised in the 18$^{th}$ c. Scandinavia[1], eliminating an individual from the society have not become standard procedures of treating the elderly. In most civilizations the fate of the elderly has been an object of care of individuals, families and the whole of the society. In 1601 in England the Elizabethan Act for the Relief of the Poor[2] came into force, which obliged parishes to take care of the poor, including the elderly. Although in Great Britain the first occupational pension insurance system was established for civil servants as early as in 1810, it covered only those who had become disabled. However, on a world scale, till 1815 very few people had been familiar with money, therefore it was unreasonable to expect organization of systemic solutions in order to provide for the old age income security. In the historic perspective, thinking about one's own future with regard to the inability to earn one's living due to the advanced age till the end of the 19$^{th}$ c. was realized by the rule of the so-called natural pension system. This meant supporting the professionally inactive elderly people by their own children. Yet, in the first half of the 19$^{th}$ c. some signs of change appeared. In Great Britain in 1834[3] the pension system was established which covered all civil servants with at least 45 years in employment. It granted non-contributory pensions in the amount of 1/60 of the last remuneration for each year of service[4]. In the very same Great Britain the first occupational pension schemes for blue-collar workers were created in the middle of the 19$^{th}$ c.[5] in the form of

1 Hadyniak B., Monkiewicz J. (1999), p. 11.
2 Wiśniewski J. (2005), p. 61.
3 Schulze I., Moran M. (2007b), p. 60.
4 Czajka Z. (2003), p. 194.
5 Schulze I., Moran M. (2007b), p. 60.

friendly societies[6]. On the continent, the beginnings of the idea to provide income to those who could not work any longer are also connected with the middle of the 19th c. This is when in Germany the Catholic bishop of Mainz[7] Wilhelm Emmanuel von Ketteler advocated that employers be obliged to pay compensation to those blue-collar workers who lost the ability to work, either temporarily or permanently, through no fault of theirs and while working, by which he laid the foundations of the Catholic social science[8]. Yet, most undertakings in this area concerned disability rather than the infirmity of old men, and covered only selected professional groups or even the employees of one specific company.

The first change in this area was an idea introduced in 1889 in Germany, when the Chancellor Otto von Bismarck forced the state pension system through, which was contributory, with the retirement age set at 70[9]. Initially, Bismarck's solution stipulated paying contributions, investment of resources, and then payments. Therefore, it was a contributory system of the capital character. In 1891 in Denmark and in 1908 in Great Britain[10] public pension systems were adopted, which, by contrast to Germany, were tax-financed, which entailed their non-contributory nature. Bismarck's solution was emulated by most European countries, and later, non-European ones as well. As early as before World War I in Belgium (1900), the Netherlands (1901), Austria[11] (1906), France (1910), Luxembourg (1911) and Romania (1912) public pension systems based on Bismarck's idea were introduced. Moreover, in many countries additional occupational pension systems emerged, regulated by agreements between employers and employees. Most of such agreements provided for payment of a pension benefit of a defined value, which is why they are called

6 Czepulis-Rutkowska Z. (2000), p. 16.

7 After the Vienna Congress, between 1815 and 1866, Mainz was included in the German Duchy of Hessen-Darmstadt. From 1866, on establishment of the North German Union, it became a part of Prussia.

8 Strzeszewski Cz. (1985), p. 233.

9 *Pension Reform and the Development of Pension Systems. An Evaluation of World Bank Assistance* (2006), p. 62.

10 This law was also adopted on the territory of modern Ireland.

11 This law was also adopted on the territory of modern Czech Republic and Slovakia.

defined benefit (DB) systems. Occasionally, some countries developed occupational schemes with defined contribution (DC), in which the amount of benefit depended on the result of investment of contributions. In 1913 in Sweden, a mixed regulation was adopted with reference to public pensions, which stipulated co-existence of two elements: the non-contributory one and the contributory one. The retirement age was defined at 67. In the very same year Germany lowered the retirement age to 65, which was later adopted in other countries. After World War I, public pension systems based on Bismarck's idea emerged in Spain (1919), Italy (1919), Lithuania (1922), Latvia (1922), Slovenia (1922), Bulgaria (1924), Estonia (1924), Poland (1927), Hungary (1928), and in the 1930s in Greece (1934), Portugal (1935) and Finland (1937). In all those countries, the initial solutions were of a capital type and were based on charging and investing contributions and then paying pensions from the income from investments. Multiple pension funds' assets proved to be an irresistible temptation for the military governments of Germany and Italy in the 1930s and 1940s, and were used for armament. Resultantly, the depleted pension systems were after the war transformed into a repartition pay-as-you-go type, in which pensions were financed by current contributions of the active participants of the system. The 1940s brought the alternative to Bismarck's contribution-based system as in Great Britain in 1942 Sir William Beveridge introduced the rules of the care of the needy[12]. In the British solution pension was perceived as the element of public social security benefit package to which each citizen was entitled. Therefore, there was no need for contributions in order to become eligible for pension; and the local community was to decide whom to reward with the benefit and of what value. The system legally introduced in Great Britain in 1946 and tax-financed was highly appreciated outside Great Britain: in Sweden, where the law of 1946 abolished contributions, in the Netherlands, where it was adopted in 1947, and in Denmark, where in 1956 it was decided to disregard the relation between the pension and the pensioner's income and to introduce the national pensions – tax-financed and pay-as-you-go.

12 Beveridge W. (1942).

Yet, the same year saw the implementation of the contributory system in Malta. In 1957 the Beveridge type of system was adopted in the former Mediterranean British colony, that is Cyprus; while in the same year in the Netherlands contributory system replaced the non-contributory one. In 1959 legislation in Great Britain and Sweden introduced additional contributory pensions. Also Ireland, which once had been ruled by Great Britain and applied British ideas concerning pensions, in 1961 changed them for a state contributory pension scheme. In 1964 Denmark started additional contributory scheme, supplementary to national pensions, and Cyprus adopted the system of fixed-rate contributions and fixed-rate pensions.

In the mid-1960s, all the present European Union countries had state contributory pension systems of the pay-as-you-go type. State pensions were the only source of financing for the elderly in the countries influenced by the Soviet Union[13], while in numerous free market economies they were supplemented by occupational pension schemes. In the times of prosperity, in the latter countries, which implemented the welfare state policy, contributory system was frequently supplemented by various tax-financed benefits. Yet, in the 1970s the welfare state reached a critical phase, with energy problems and subsequent decrease in economic growth. That was the moment of realization of the inefficiency of repartition systems, especially threatened by ageing population. Classic demographic pyramids picturing European populations at the beginning of the 20th c. suddenly started taking a form reminiscent of sarcophagus[14]. But it is impossible to dismiss criticism of pension systems with reference to effects, which are reflected in this or another shape of demographic graphs. As Szumlicz[15] rightly noticed, by introducing pro-natal policy and prolonging the professional activity through maintenance of psycho-physical fitness, it could be possible to achieve improvement in the demographic burden index. There definitely was a shortage of such operations in the political

13 Only in Romania in 1968 an additional occupational pension scheme was introduced.
14 Góra M. (2003), p. 48.
15 According to the initial opinion about that work passed to author by Professor Szumlicz.

practice of the majority of European countries in the 1970s and 1980s. Despite being conscious of the need for systemic changes, the European countries failed to produce any idea how to change pension financing.

Another crucial systemic change on a world scale was the solution proposed by an American economist Milton Friedman, which was implemented by José Piñera in Chile[16] from 1980 under the rule of Augusto Pinochet. It was based on a correlation between pension resources management and capital markets. A dynamic growth of financial markets in Chile in the 1980s together with high profitability of pension funds encouraged other countries to implement the Chilean idea to multiply resources. The exceptional success of solutions adopted in Chile was the reason for its popularity among the international society, struck by inefficiency of their pension systems so adversely affected by demographic changes. Also with reference to occupational schemes, defined contribution schemes started gaining an increasing recognition.

Against that background more and more significant is the solution commonly known as the NDC (notional or non-financial defined contribution). The NDC is a defined contribution, pay-as-you-go pension system[17] in which the amount of pension depends on the amount of resources recorded on an individual account, which after a proper indexation at the moment of retiring are divided considering the life expectancy of the pensioner. The NDC system entails individual accounts that 'accumulate' all the contributions of a worker, and then convert that sum into an annuity at retirement, but the return on contributions is 'notional', that is, not based on marketable investments in physical or financial assets. It seems that the demarcating route in such thinking about pensions was the proposal given by James Buchanan in the year 1968[18]. His idea was developed in 1988 by Boskin, Kotlikoff, and Shoven[19], and practically implemented as pension system points in Germany and

16 Larraín Ríos G. (2005).
17 Palmer E. (2006), p. 18.
18 Buchanan J. (1968).
19 Boskin M., Kotlikoff L. J., and Shoven J. (1988).

France[20]. However, the contemporary shape was adopted only in Swedish legislation from June 1994[21].

In 1994 the World Bank published *Averting Old Age Crisis,* in which it promoted multi-pillar model, comprising three pillars[22]. The World Bank proposes in this document that pension systems should consist of three pillars: the 1st one – compulsory, traditional and traditionally managed; the 2nd one – which would individualize its resources and invest in capital markets; the 3rd pillar – thoroughly voluntary, based on personal prudence of members of the system, which would exploit any available tools of financial engineering. The 1st pillar, basic and mandatory, was expected to prevent poverty. It remained within the state jurisdiction and was managed by a state agency applying a repartition method. The 2nd pillar was supposed to follow actuarial rules. Both private and state management are allowed. Its specific feature was obligation to save for pension. The 3rd pillar comprises various forms of insurance and pension plans. This model was promptly adopted first by the Latin American countries and then in Europe. Until 2000 the European Union practically disregarded the issue of pensions. Since 2000, in view of a wide variety of pension schemes in its Member States, the EU has been implementing the so-called open coordination of pension systems of different countries.

The Open Method of Co-ordination[23] was initiated in 2000 during the meeting of the Extra-ordinary European Council of Heads of State and Government in Lisbon, as an element of the Lisbon Strategy. The general aim of the Lisbon Strategy was to stimulate the economic development of Europe with the aim 'to catch up' with the United States in the 10 years' perspective. The Open Method of Co-ordination was an important instrument of performance as a 'soft' law pointed desired directions of development. It was openly patterned after the European Employment Strategy (EES) and presented as 'the third way' between centralization

20 Palmer E. (2006), p. 17.
21 Könberg B., Palmer E., Sundén A. (2006), p. 449.
22 *Averting the Old Age Crisis* (1994).
23 Rutkowska Z. (2008).

and fragmentation of regulation. It could be no one instrument of the union policy, but the part of a wider instruments range, which included also legislation, social dialogue, structural funds, community action programmes, etc. The Open Method of Co-ordination provides elasticity in the area of setting the date and the manner of implementation of the accepted aims and also ensures separateness in the social and economic life of particular countries. The aims are formulated as the benchmarks and all the indicators are relatively embedded in the particular country's special situation. That is the only sanction of the lack of accomplishment of the aims – the critical evaluation by the Union's institutions and other Member States.

The Open Method of Co-ordination provides this framework of political co-ordination without legal constraints. Member states agree to identify and promote their most effective policies in the fields of social protection and social inclusion with the aim of learning from each others' experiences.

This is a flexible and decentralised method, which involves[24]:

- agreeing to **common objectives** which set out high-level shared goals to underpin the entire process,
- agreeing to a set of **common indicators** which show how progress towards these goals can be measured,
- preparing **national strategic reports**, in which Member States set out how they will plan policies over an agreed period to meet the common objectives,
- **evaluating** these **strategies** jointly with the European Commission and the Member States.

Through the Community Action Programme to combat social exclusion, the EU social protection and social inclusion process provided, from 2002 to 2006, a framework for the exchange of best practice and mutual learning.

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[24] http://ec.europa.eu/employment_social/spsi/the_process_en.htm, accessed 22 June 2008.

Since January 2007 PROGRESS, the EU's new integrated programme for employment and social solidarity supports the goals set out in the Social Agenda and contributes to the Union's wider strategy for jobs and growth.

In the 20$^{th}$ c. it was common in the world and in Europe[25] to distinguish **the Anglo-Saxon approach**, in which pension system mainly depended on employer-sponsored pension plans, and its opposition, i.e. **the Bismarckian approach**, which gave priority to the government as a pension system organizer.

The following division into three worlds and their regimes of welfare state was introduced by Esping-Andersen[26]: 1) the liberal welfare state, which appeared in the United States before the New Deal, in Canada and Australia, 2) the corporatist welfare state, which appeared in Austria, France, Germany, and Italy, and 3) the social-democratic welfare state, which appeared in the Scandinavian countries and in the United States after the New Deal.

**The liberal** welfare state regime is the one in which means-tested assistance, modest universal transfers, or modest social-insurance plans predominate. Benefits cater mainly to a clientele of low-income, usually working class and state dependents. In that regime the state encourages the market, either passively – by guaranteeing only the minimum – or actively – by subsidizing private welfare schemes.

In **the corporatist** welfare state regime the liberal obsession with market efficiency and co-modification was never preeminent and, as such, granting of social rights was hardly ever a seriously contested issue. This corporatism was subsumed under a state edifice perfectly ready to displace the market as a provider of welfare; hence, private insurance and occupational fringe benefits play a truly marginal role. Simultaneously, the corporatist regime was also typically shaped by the Church, and hence strongly committed to the preservation of traditional family-hood.

25 Sass S. (2006), p. 83.
26 Esping-Andersen G. (1990), pp. 26-28.

**The social-democratic** welfare state regime tolerates the dualism between the state and the market, between working class and middle class. The social democrats advocated a welfare state that would promote the equality of the highest standards, not the equality of minimal needs as was pursued elsewhere. The social democratic regime's policy of emancipation was addressed both to the market and the traditional family.

In turn, Fox and Palmer[27] defined two main pension pillars developed after the year 1994 in the following way:

- **1st pillar:** A large, mandatory public or quasi-public system with inter- and intra-generational redistribution, which can be fully funded (for example, Denmark and the Netherlands), partially funded (for example, Morocco, the United States, and India); or unfunded (for example, Germany and Brazil) and in which the DB or notional defined contribution (NDC) formula determines benefits.
- **2nd pillar:** Fully funded, defined contribution systems in which benefits depend on the assets on the individual's account at retirement. These may be: 1) centralized and government-managed provident fund systems, which usually provide lump-sum benefits but may offer an annuity purchase, or 2) individual financed account systems in which the participant' money is invested in privately managed market funds. Participants may take benefits as a lump sum, use them to purchase an annuity, or withdraw them in phases.

However, Holzmann i Hinz[28] distinguish five pension pillars, numbering them from 0 to 4:

- **'0' pillar:** 'basic' or 'social pension', at least social assistance (universal or means-tested); participation is universal or residual and pillar is financed by budget or general revenues.
- **1st pillar:** public pension plan, publicly managed (defined benefit or notional defined contribution); participation is mandated and pillar is financed by contributions, perhaps with some financial reserves.

27 Fox L., Palmer E. (2001), p. 91.
28 Holzmann R. and Hinz R., et al. (2005), p. 10.

- **2nd pillar:** occupational or personal pension plan (partially or fully funded defined benefit or funded defined contribution); participation is mandated and the pillar is collateralized by financial assets.
- **3rd pillar:** occupational or personal pension plan (fully funded defined benefit or fully funded defined contribution); participation is voluntary and the pillar is collateralized by financial assets.
- **4th pillar:** access to informal support (family), other formal social programmes (health care), and other individual financial and nonfinancial assets (home ownership); participation is voluntary and the pillar is collateralized by financial and nonfinancial assets.

According to Góra[29], the present changes in pension insurance systems fall into the following categories:

- The Anglo-Saxon approach,
- The Latin American approach,
- The Polish-Swedish approach.

**The Anglo-Saxon approach** involves the reduction of the traditional publicly managed pension system to the minimum level. There are individual approaches, where the members are offered a mosaic of supplementary solutions, in the form of voluntary additional schemes and pension plans exploiting the highly developed financial markets. In this approach both the employee or the employer provide funds to the system, and so does the state, which, to a larger or smaller extent, has to cover the deficits of the traditional part of this system with the funds obtained from taxation.

**The Latin American approach** is also based on a radical reduction of the traditional compulsory system. It is supplemented by another system, in which participation in selected programmes is no longer voluntary as in the previous approach, but has become mandatory. This system includes also fully voluntary programmes and pension plans, which are collectively known under the name of `the 3rd pillar´[30]. Also in the Latin American approach the old, ineffective system has to be supported.

[29] Góra M. (2003), pp. 140 and further.

[30] Currently, the World Bank departs from this `pillarization´ of pension systems, which has by now become so widely present in social consciousness.

**The Polish-Swedish approach** thoroughly eradicates the traditional system and replaces it with a brand new one, specially designed to take up the role of a general insurance system. In the new situation, the concept of the traditional impersonal 1st pillar is completely abolished, because both publicly and privately managed parts of the system are based on the same rule: individualization of the resources of the system and the use of financial instruments for their multiplication. The new approach has a number of characteristic features:

- endogenic approach to the system, understood as making it independent from current politics;
- participation in the system on individual basis, through the exclusive application of the DC[31] rule in the accumulation period;
- annuitization of the accounts at the moment of retiring;
- private[32] management of funds, not generating conflicts with the public character of the public pension system;
- actuarial balancing of the system resulting from actuarial monitoring;
- diversification of the risk in the system, which is achieved by basing the system on both realistic economy[33] and financial markets[34].

In the Latin-American approach Fox and Palmer[35] distinguish two different models, illustrated by these authors by examples of Argentina and Bolivia.

**The Argentinean reform** had no prospect of moving straight into fully funded system. It mostly honored acquired rights under the old system and paid off contributors as they retired (compensatory pension). In that model the government, not the individual, bears the longevity

31 The acronym DC comes from the English expression defined contribution, as opposed to defined benefit.
32 The present management of the Social Security Fund and the individual accounts by *Zakład Ubezpieczeń Społecznych* (the Social Security Institution), which is a public institution, may, within the existing legal system, be replaced by management by a private institution.
33 Government securities – bonds and treasury bills.
34 Private shares and bonds issued by enterprises.
35 Fox L., Palmer E. (2001), pp. 106-107.

risk. The funded system transition is therefore mostly tax-financed, with a reduction in future benefits for contributing participants as well.

**The Bolivian reform** moved completely and instantaneously to the second-pillar system for all participants. It replaced the old system, which was not sustainable, had small coverage, and had a majority of its complementary funds in bankruptcy. The law created the Bonosol, as a fixed payment to all those over the age of 65, but only those aged 21 or more in 1995. The sources of the Bonosol funds were the privatization of energy and mineral resources. The objective of the Bonosol was threefold: 1) to provide pension coverage for those outside the formal pension system; 2) to distribute the profits of the capitalization (privatization) programme; and 3) to reduce poverty. The funds for the Bonosol are in special accounts managed by the private firms[36].

Holzmann, MacKellar, and Rutkowski[37] classify two reform styles: 1) a parametric style, and 2) a paradigmatic style.

**A parametric reform** is an attempt to rationalize the pension system by seeking more revenues and reducing expenditures while expanding voluntary private pension provisions. It means usually raising the retirement age, reducing pension indexation, and curtailing sector privileges.

**A paradigmatic reform** is usually connected with moving away from the monopoly of a pay-as-you-go pillar within the mandatory social security system. It means a deep change in the fundamentals of pension provision typically caused by the introduction of a mandatory funded pension pillar, along with a seriously reformed pay-as-you-go pillar and the expansion of opportunities for voluntary retirement savings.

Żukowski[38] gives pension reform classification, distinguishing three kinds of reforms: 1) the change of parameters, 2) the reform in the system framework, and 3) the systemic (structural) reform.

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36 The so-called AFPs (*Asociaciones Financieros Privados*). At first the government divided the country into two duopoly AFPs. The duopoly lasts for five years, after which time the market is scheduled to open up for new entrants.

37 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 8.

38 Żukowski M. (2006), p. 8.

**The change of parameters**, or parametric reform, usually means the change of pension contribution level or the change of retirement age.

**The reform in the system framework** means the change of instruments inside of hitherto structure and aims.

**The systemic (structural) reform** means the change of the system structure and aims.

Brooks and Razin[39] indicate three main question areas for present-day reformers of pension systems the answers to which they need to find: 1) who will pay for the unfunded liabilities in Social Security?, 2) what are the benefits and risks of the different mechanism for retirement savings – ranging from the government-run, pay-as-you-go model to individual accounts-based systems?, and 3) how politically viable are different reform proposals, both in the court of public opinion and given institutional constrains, such as rigid balanced-budget rules, that may impede reforms?

Gruber and Wise[40] distinguish in the present world two main kinds of pension reforms: 1) the first kind of reform – delays the benefit eligibility ages, and 2) the second kind of reform – assumes common provisions, reducing retirement incentives in some countries and increasing incentives in other countries.

Bonoli and Shinkawa[41] point four different contemporary logics of pension reform in different groups of countries: 1) the Social Insurance Countries, 2) the Multipillar Countries, 3) the Bismarkian Lite, and 4) the Incomplete Pension Systems.

Żukowski[42] states the two main aims of pension systems reform executed in Europe recently are: 1) financial solvency and 2) individualization, which serve to realise a general aim, which is assurance of long-term system solvency under the pressure of financial problems, consequences of ageing society and changes on the labour market.

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39 Brooks R., Razin A. (2005), p. 3.
40 Gruber J., Wise D. A. (2004), p. 2.
41 Bonoli G., Shinkawa T. (2005), pp. 8-18.
42 Żukowski M. (2006), p. 70.

Ambachtsheer[43] suggests two examples of innovative model solutions in the area of pension funds, using concepts from the area of financial engineering: 1) the Dutch health care sector pension fund (PGGM), and 2) the Australian collective corporate-sector pension fund for the state of Queensland (SunSuper).

**The PGGM** has initiated using of put option as a cost of insurance against future deficits of its assets.

**The SunSuper's** management proposed its participants to create their own investment strategies around three investment options (low, medium, and higher risk), each carefully optimized and rebalanced over time.

Implementation of the pension reform, which depends on metamorphosis from repartition system to fully-funded one, is connected with the transition costs. The financing of the transition is a complex technical issue. In the case of Chile, they addressed it successfully without raising taxes but each country must resolve this problem considering its own circumstances. The key insight in this regard was that, contrary to the widely held belief, there was no 'economic' transition cost, because there was no cost to the GNP due to this reform (on the contrary). A completely different, and relevant, issue is how to confront the 'cash-flow' transition cost to the government of recognizing, and ultimately eliminating the unfunded liability created by the pay-as-you-go-system.

The Chileans used five 'sources' to finance the fiscal costs of changing to a personal retirement account system, which could be a pattern for European countries reforming their pension systems[44]:

- Using debt, the transition cost was shared by future generations. In Chile, roughly 40 percent of the cost has been financed by issuing government bonds at market rates of interest. These bonds have been bought mainly by the AFPs as part of their investment portfolios, and that 'bridge debt' should be completely redeemed when the beneficiaries of the old system are no longer with us (a source of

43 Ambachtscheer K. P. (2007), pp. 14-15.

44 Piñera J. (1996).

sadness for their families and friends but, undoubtedly, a source of relief for future treasury ministers).

- Since the savings rate in a defined-contribution system, like the personal retirement account, needed to finance adequate retirement benefit levels was lower than the existing payroll taxes, a fraction of the difference between them was used as a temporary 'transition tax' (which was gradually reduced to zero, lowering the cost of hiring labour and leading to more employment).
- In a government's balance sheet there are liabilities – such as social security and health obligations – but also government-owned enterprises, land, and other types of assets. Since at that time we were also privatizing government-owned assets, especially companies, that was one way to finance the transition that had several additional benefits, such as increasing efficiency, spreading ownership, and depoliticizing the economy.
- The need to finance the transition was a powerful incentive to reduce wasteful government spending. Prior to the reform, the government deliberately created a budget surplus, and for many years afterwards the treasury minister was able to use the need to 'finance the transition' as a powerful argument to contain the permanent pressure from all sources to increase government expenditures.
- The increased economic growth fueled by the personal retirement account system substantially increased tax revenues, especially those from the value-added tax.

The transition costs are a little different in the case of pension reforms undertaken in Europe. The deficit which arises on account of the lack of sufficient wherewithal to the pay-as-you-go system is usually covered by the budget donation or privatisation income. Obviously the budget donation means the necessity to increase taxes, which is a direct transition cost for the tax-payers, or the government bonds issue, which is deterred cost, transmitted usually to the future generations. Privatisation income is time- and value-limited. The budgetary consequences are not only the effect of pension reforms. The widely understood financial consequences mean the effects of the reforms as regards costs, receipts, profits, expenditure, financial results and the volume of future payments.

In the case of Polish pension reform apart from budgetary consequences, according to Kołosowska, we can distinguish financial consequences of implementation of pension reform for different groups of subjects[45]:

- for the Social Security Fund (*Fundusz Ubezpieczeń Społecznych, FUS*) and the Social Security Institution (*Zakład Ubezpieczeń Społecznych, ZUS*),
- for participants of the system,
- for employers,
- for intermediaries existing in the pension system.

Summing up we can state that pension reforming, which depends on the transforming from the pay-as-you-go solution to fully-founded one is every time connected with transition costs. We must be aware that the transition costs are time-limited and the effect of the increase of them has to be the return to the normality in the pension area. That normality means reigning by proprietors their private funds. Summarizing our deliberations in the area of pension reforms, it is necessary to agree with Hughes and Stewart's[46] conclusion that much greater attention in pension reforming needs to be paid to the links between the methods of financing pensions which are now being adopted and the likely evolution of pension entitlements in the future in terms of the level of retirement income on which old people can count during their period of retirement.

In conclusion, it is vital to explain the basic terms used in this book. This glossary was prepared on the basis of the terminology presented in Polish by Żukowski[47] and in English by the World Bank in *Averting the*

[45] Kołosowska B. (2004).
[46] Hughes G., Stewart J. (2004), p. 8.
[47] Żukowski M. (2006), pp. 6 and 7.

*Old Age Crisis*[48] and the Independent Evaluation Group of the World Bank[49]:

- **actuarial forecasts:** forecasts used to project the long-run income and expenditure streams for pay-as-you-go (PAYG) pensions; actuarial models can also be developed to project income and expenditures for a variety of policy alternatives and switching patterns, including the value of the transition deficit under alternative scenarios;
- **AFP (*Administradora de Fondos de Pensionies*):** Pension Fund Administrator – a private pension fund manager in Chile;
- **annuity:** a stream of payments at a specified rate, which may have same provision for inflation-proofing, payable until same contingency occurs, usually the death of the beneficiary or a surviving dependent;
- **bridge pension:** pension payable from retirement to legal retirement age;
- **capitalization:** the method of pension system financing in which assets from contributions are collected to be paid later as pensions;
- **Chilean pension reform:** in 1981, the government gradually replaced the traditional collective PAYG system, which was managed by the state and which had defined but uncertain benefits, with a fully funded system managed by the private sector that has defined contributions but uncertain returns; many countries have since implemented different versions of this reform;
- **company pension scheme:** the voluntary or rarely compulsory pension system organized by the employer for his or her employees, which can be organized for a single company, a group of companies, a specific line of business, or the whole sector[50];
- **contributions:** payments made by employers and/or employees to a pension system, frequently through payroll deductions; also known as a payroll tax;

48 *Averting the Old Age Crisis* (1994).

49 *Pension Reform and the Development of Pension Systems: An Evaluation of World Bank Assistance* (2006), pp. xlvii-xlx.

50 For example, the public sector.

- **coverage ratio:** the number of workers actively contributing to a publicly mandated contributory or retirement scheme, divided by the estimated labor force;
- **covered workers:** workers that are included in a formal pension plan;
- **defined benefit (DB) system:** the pension system in which the amount of pension is defined in advance – either its sum or a rule of its calculation, which usually takes into consideration the amount of remuneration and a period of participation in the system; a guarantee by the pension agency or government that a pension will be paid based on a prescribed formula, in which contributions may not be tied actuarially to benefits;
- **defined contribution (DC) system:** a pension system in which the amount of contribution is defined and the amount of pension depends on the value of the fund collected from the contribution considering the profits made from resources accrued–thus, the amount of pension is a function of the contributions accrued; a pension plan in which the periodic contribution is prescribed and the benefit depends on the contribution plus the investment return;
- **dependency ratio:** the ratio of persons receiving pensions from a certain pension scheme divided by the number of workers contributing to the same scheme in the same period;
- **earnings ceiling:** a maximum amount of earnings above which contributions to a public pension system (or multi-pillar system) are not required;
- **earnings-related** (or **contribution-related) pensions:** pensions from pay-as-you-go systems that are derived using a formula related to past earnings or contributions to the system;
- **first pillar** or **1st pillar:** a publicly managed, unfunded, defined benefit pillar; the pay-as-you-go system;
- **formal sector (economy):** those enterprises that fully comply with government requirements for taxation, contributions to social insurance, and other legal requirements for business;

- **full funding:** the accumulation of pension reserves that total 100 percent of the present value of all pension liabilities owed to current members;
- **funded pillars (systems):** systems that are invested in assets, in contrast to ones that are paid for by taxes, either through general revenues or on a contributory basis;
- **GNP:** gross national product;
- **gross domestic product** (**GDP**) or **gross domestic income** (**GDI):** one of the measures of national income and output for a given country's economy; GDP is defined as the total market value of all final goods and services produced within the country in a given period of time (usually a calendar year); it is also considered the sum of value added at every stage of production (the intermediate stages) of all final goods and services produced within a country in a given period of time, and it is given a money value;
- **implicit public pension debt (net):** the value of outstanding pension claims on the public sector minus accumulated pension reserves;
- **informal sector** (or **economy):** enterprises that do not fully comply with government requirements for taxation, contributions to social insurances, and other legal requirements for businesses, or firms and workers that are not included in such requirements;
- **individual pension scheme:** the voluntary capital system of additional old age income security, including inter alia life insurance, individual pension accounts or targeted savings;
- **legal retirement age:** the normal retirement age, written into pension statutes;
- **mandatory pension system:** a pension system for which contributions are required for all workers in a country or for workers in particular covered sectors of the economy;
- **market capitalization:** the share price multiplied by the number of shares outstanding; listed domestic companies are the domestically incorporated companies listed on the country's stock exchanges at the end of the year;

- **means-tested benefits:** benefits that are targeted to the poor based on income and assets;
- **minimum contributory period:** the minimum length of time that contributions must be made to a public pension system to receive a pension at retirement;
- **minimum pension guarantee:** a guarantee provided by the government to bring pensions to some minimum level, possibly by 'topping up' the capital accumulation needed to find the pensions;
- **multi-pillar reform (system):** pension reform (system) with a first pillar that is public (generally pay-as-you-go); a second pillar that is mandatory and funded; and a third pillar that is voluntary and funded; in this book, multi-pillar reform is used to describe any reform that involves or assists in implementing a mandatory, funded pillar;
- **notional defined contribution (NDC) repartition system**: the pension system in which the amount of pension depends on the amount of resources recorded on an individual account, which after a proper indexation at the moment of retiring are divided considering the life expectancy of the pensioner; resembles a defined contribution system in having individual accounts that 'accumulate' all the contributions of a worker, and then converting that sum into an annuity at retirement, but in which the return to contributions is 'notional' that is, not based on marketable investments in physical or financial assets;
- **occupational pension scheme:** an arrangement by an employer to provide retirement benefits to employees;
- **old age security:** all institutionalized sources of securing income for the old age, which may include public, company, and individual pension systems;
- **parametric reform:** a type of pension reform that maintains the structure and administration of the system but changes key elements of the parameters, such as contribution rates, retirement ages, or average benefit levels;

- **pay-as-you-go:** in its strictest sense, a method of financing whereby current outlays on pension benefits are paid out of current revenues from an earmarked tax, often a payroll tax;
- **pension reform:** an alteration to the rules governing the pension system;
- **pension system:** the way in which the current GDP is divided between those in employment and pensioners, and from the point of view of an individual participant, it is also an instrument of allocation of his or her income during the whole lifecycle;
- **pension system balance:** the difference between pension fund revenues and pension fund expenditures in a pay-as-you-go system;
- **point systems:** pay-as-you-go pension systems in which pensions are determined according to a 'point' formula in which the individual's earnings are compared to the average wage;
- **prefunding:** the accumulation of contributions in a funded system;
- **privately managed:** funded pensions invested in assets by private pension funds or private asset managers (not managed by the government);
- **provident fund:** a fully funded, defined contribution scheme in which funds are operated and generally managed by the public sector;
- **public pension system:** the mandatory pension system being a part of a social insurance system, organized by the state for its citizens, those in employment or hired workers;
- **repartition or non-financial pension system:** the method of pension system financing in which current pensions are paid from current contributions or taxes currently paid by or for those in employment who are insured;
- **replacement rate:** the value of a pension as a proportion of a worker's wage during some base period, such as the last year or two before retirement or the entire lifetime average wage; it also denotes the average pension of a group of pensioners as a proportion of the average wage of the group;

- **second pillar** or **2nd pillar:** a funded, defined contribution pillar with no redistribution; with more ambiguous systems (e.g. systems that are partially funded or are managed by a tripartite board), this book classifies a system as having a second pillar if the funds are separate from the budget and invested in assets; such systems generally rely on individual accounts;
- **social pensions:** non-contributory pensions paid to those over a certain age who are not receiving contributory pensions or whose contributory pensions are less than the social pension;
- **standard retirement age:** the usual age at which employees become eligible for occupational pension benefits, excluding early retirement provisions;
- **systemic pension reform:** a type of pension reform that replaces the existing PAYG system with a multi-pillar or other type of pension system that diversifies the structure of benefits, administration, and funding of the pension system;
- **third pillar** or **3rd pillar:** a voluntary, privately managed pension pillar;
- **transition cost:** the cost to the government of transforming a PAYG system to a multi-pillar system, which involves making the implicit pension liability explicit;
- **transitional deficit:** the government deficit caused by the transition cost;
- **uncovered workers:** workers that are not included in a formal pension plan.

# Chapter I
# PENSION CONCEPTS

This chapter is devoted to the description of five basic pension concepts, which to various extent are currently being used in Europe. The chronological order is followed, starting with the first concept to have emerged. First, the three basic ideas on securing the old age income are discussed: 1) Bismarck's concept of 1889, then 2) Beveridge's one of 1942, followed by 3) Friedman and Piñera's idea of 1980. Next, 4) the World Bank's three-pillar concept of 1994, and 5) the open method of coordination, currently applied to pensions in the European Union are presented. Each subchapter is accompanied by a biographical note of the author of the concept, and in the case of an institution – its history.

## 1.1 OTTO VON BISMARCK'S PENSION CONCEPT

### 1.1.1 Biography

**Otto Eduard Leopold von Bismarck-Schönhausen** – born on 1 April 1815 in Schönhausen; **Duke of Bismarck-Schönhausen**, **Duke of Lauenburg;** a German politician, the Prime Minister of Prussia, the Chancellor of the Reich dubbed **the Iron Chancellor** (*der Eiserne Kanzler*); under his rule Prussia became one of the most powerful countries in Europe; he contributed to the unification of Germany[1]. He was born in 1815 in the Junker Prussian family in Schönhausen. He studied law at the University of Göttingen, but got a degree in Berlin. In 1835 he started work in a court in Berlin, and then in Aachen. Three years later he came back to his family estate, which he started to manage. In the meantime he did the military service. He was a keen traveller, who visited England, Scotland, France, and Switzerland. In 1847 in Alt Kolziglow near Bütow he married Johanna von Puttkamer. In 1851 he became a Member of

[1] Based on: Andrzejewski M. (2003), and *Wielka Encyklopedia PWN* (2001), v. 4, pp. 122-123.

the Parliament (*Bundestag*) of the German Union (*Deutscher Bund*) in Frankfurt on the Main. Next he worked for the diplomatic service of the German Union, from 1859 as a deputy in Petersburg, and in 1862 as an ambassador in Paris. In 1862 he became a Prime Minister and the Minister of Foreign Affairs of Prussia. In 1864 he won a war with Denmark for Schleswig-Holstein, in which Prussia allied with Austria. Two years later, in 1866, Bismarck led to the war against Austria, whose result was the dissolution of the German Union and creation of the North German Union (*Norddeutscher Bund*), of which he became a Chancellor (*Bundeskanzler*). In 1867 he received a land estate near Alt Kolziglow in Versin. In the same year he purchased a huge estate with a palace in nearby Varzin. In 1870 he forged a notorious telegram from Ems, which brought about the Prussian-French war and, in effect, led to the unification of Germany. On 18 January 1871, the Second Reich was proclaimed, referred to as the German Empire (*Deutsches Kaiserreich*). Bismarck became its Chancellor, along with the title of the duke and a nickname of **the Iron Chancellor**. Between 1871 and 1878 Bismarck waged the so-called war for culture (*Kulturkampf*), which in fact meant fight between the Prussian government and the Catholic church, and on the Polish territory under the Prussian rule it entailed intensive germanization of the Polish people. In 1878 Bismarck led to passing of the anti-socialist act, pursuant to which the activity of socialist, social democratic, and communist organizations was banned. Between 1879 and 1887, Bismarck prompted signing a treaty of alliance with Austro-Hungary and Italy (the so-called Tripple Alliance) and with Russia. On 25 January 1890, the Reichstag rejected the proposal to extend the anti-socialist act, thanks to which social democracy became legal again. On 20 February 1890, the first election to the Reichstag took place, which was decisive for Bismarck's failure. On 20 March 1890, Bismarck resigned from the office and the Emperor Wilhelm II dismissed him from the office of the Chancellor. For all the years of his service he was rewarded with the title of the Duke of Lauenburg and the rank of general-colonel. After his dismissal in 1890, the former Chancellor settled in Varzin and Fredrichsruh. In the following years, aided by Lothar Bucher, he wrote three volumes of his memoires titled *Thoughts and Memories*

(*Gedanken und Erinnerungen*), published in 1898-1921. Bismarck died on 30 July 1898 in Friedrichsruh near Hamburg.

### 1.1.2 Historic background

In Germany, the idea of paying benefits to those who cannot perform work any longer dates back to the middle of the 19$^{th}$ c. It was then that the Catholic bishop of Mainz[2] Wilhelm Emmanuel von Ketteler advocated that employers be obliged to pay compensation to those labourers who lost the ability to work, either temporarily or permanently, through no fault of theirs and while working. In doing so he created the foundations of the Catholic social sciences[3]. The first self-help organizations which provided also pension benefits were established. The first unions in Germany were started in 1849. On 10 April 1854, the Prussian law on miners' guilds (*Preußische Knappschaftsgesetz*)[4] was passed. 1859 marked the beginning of the first self-help organization of railwaymen (*Eisenbahnverwaltungen für ihre Arbeiter auf dem Gebiet der Sozialversicherung Versorgungskassen*)[5]. In 1878 Bismarck took advantage of two attempts on the Emperor Wilhelm I, and forced through the act against aspirations of social democrats considered dangerous to the general public (*Gesetz gegen die gemeingefährlichen Bestrebungen der Sozialdemokratie*)[6]. In 1881 the German Emperor Wilhelm

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2 After the Vienna Congress in 1815-1866, Mainz became a part of the German Duchy of Hessen-Darmstadt. In 1866, on establishment of the North-German Union, it was included in Prussia. From 1871, the King of Prussia was the hereditary German Emperor.

3 Strzeszewski Cz. (1985), p. 233.

4 It was the basis for the miners' guilds providing insurance for miners. In the second half of the 19$^{th}$c. they comprised the Federal Guild (*Bundesknappschaft*). Cf.: http://www.deutsche-rentenversicherung-knappschaft-bahn-see.de/nn_40284/DRVKBS/de/Inhalt/1UeberUns/6__geschichte/1__knappschaft/knappschaft __gen.html, accessed 27 December 2007.

5 It was the basis for the Federal Railway Insurance Institution in the 2$^{nd}$ half of the 20$^{th}$c. (*Bahnversicherungsanstalt*). Cf.: http://www.deutsche-rentenversicherung-knappschaft-bahn-see.de/nn_40284/ DRVKBS/de/Inhalt/1__UeberUns/6__geschichte/2__bahn/bahngen.html, accessed 27 December 2007.

6 Until the act was abolished in 1890, 332 organizations were dissolved, whose alleged aim, stemming from their social-democratic, socialist, or communist ideas, was to

I Friedrich Ludwig von Hohenzollern delivered an address (*Kaiserlichen Botschaft*) to the Parliament, written by Bismarck, in which he ordered the state to provide care for those suffering disability resulting from old age[7]. In 1883 the first state legislation on sickness insurance was introduced, and in 1884 – on accident insurance[8]. Bismarck considered introducing the public pension insurance system in the political perspective, and with a view to weakening the political influence of socialists, he was aiming at integration of blue-collar workers with the young German state[9]. This legislation was supposed to give blue-collar workers a sense of security in the old age and help them realize that it is the state that cares about their future, not trade unions[10].

### 1.1.3 Main elements of pension concept

Soon, in 1889, Germany enjoyed the first in the world state legislation on the benefit and pension (*Invaliditäts- und Alterversicherungsgesetz*)[11], commonly attributed to the Chancellor of the German Empire, Otto von Bismarck[12]. The worldwide novelty of this solution concerned mainly the obligatory nature of pension insurance; a statutory obligation was introduced, and employers were held responsible for complying with it. The scheme covered blue- and white-collar workers on law incomes. It

overthrow the current system. Among them were numerous trade unions, which often supported social democracy. Cf.: http://www.dgb.de/dgb/ geschichte/ bewegtez/ DiefrJahre/index_html, accessed 21 February 2008.

7 Liedtke P. M. (2006).

8 Ratajczak J. (2004), p. 239.

9 *The person who has* [the perspective of – J.P.] *an old-age pension is more satisfied and easier to rule than the one devoid of it.* Cf.: http://www.dgb.de/dgb/geschichte/bewegtez/DiefrJahre/index_html, accessed 21 February 2008.

10 Formally, the beginning of the organized trade unions was on 14 March 1892 in Halberstadt, where the foundation conference of the first trade headquarters, i.e. German Trade Unions General Commission (*der Generalkommission der Gewerkschaften Deutschlands*), established by representatives of 57 trade associations. Cf.: http://www.dgb.de/dgb/geschichte/bewegtez/DiefrJahre/i , accessed 21 February 2008.

11 Schulze I., Jochem S. (2007), p. 671.

12 Rürup B. (2002), p. 137.

excluded miners, who stood by their own occupational pension scheme[13]. The original solution provided for paying pension contributions, investing the accumulated resources, and paying pension benefits. Contributions were paid in 50% by employees and in 50% by employers, subsidized by the central budget. The average contribution, different for different income groups, amounted to 1.7% of remuneration[14]. Employers transferred collected contributions to an insurance institution, which was under obligation to invest them in profitable ways and pay pensions. Thus, it was an obviously capital solution, devoid of individual records of contributions. The retirement age was defined as 70[15]. The minimal qualifying period of eligibility to payment was also a 30-year participation in the scheme[16]. The main idea of this insurance was the legal assumption that the elderly would become disabled before the age of 70, and as such they would obtain benefits for those unable to work. Law was coming to their rescue since as a result of the natural loss of power they became infirm, which justified the assumption on their becoming disabled[17].

### 1.1.4 Implementation and development

In 1890 the first national insurance funds for blue-collar workers were established, and in 1891 *Invaliditäts- und Alterversicherungsgesetz* came into force. In 1911 the compulsory pension insurance covered all white-collar workers[18]. In 1912 a separate legislation on pensions for miners was introduced. In 1913 the retirement age was defined as 65[19], and a minimum contribution period was established at 10 years for men and 6 for women and the disabled[20]. The act of 1923 on miners' guilds

13 Czajka Z. (2003), pp. 146-147.
14 Schulze I., Jochem S. (2007), p. 671.
15 Żukowski M. (2006), p. 120.
16 Schulze I., Jochem S. (2007), p. 671.
17 Jędrasik-Jankowska I. (2004), p. 70.
18 Schulze I., Jochem S. (2007), p. 671.
19 *Pension Reform and the Development of Pension Systems. An Evaluation of World Bank Assistance* (2006), p. 62.
20 Schulze I., Jochem S. (2007), p. 671.

introduced the uniform miners' insurance in the whole Reich, including health, disability and old age insurance[21], and the retirement age for blue-collar workers was lowered to 65[22]. In 1925, the first pension insurance companies were set up for craftsmen, the self-employed and authors[23]. In 1929 the retirement age of 60 for unemployed clerks was introduced[24]. From 1933, the resources of the pension system started being used for implementing the government armament programme[25]. In 1938 the pension insurance for craftsmen was introduced.

## 1.2 SIR WILLIAM BEVERIDGE'S PENSION CONCEPT

### 1.2.1 Biography

**William Henry Beveridge, the First Baron Beveridge** – born on 5 March 1879 in the city of Rangpur[26] in the Eastern Bengal, then on the territory of the British India; a British economist, lawyer, and social reformer; known as the author of the so-called Beveridge Report of 1942, whose proper title was *Social Insurance and Allied Services*[27], which after World War II became the foundation of labour policy of the Welfare State, in which the crucial factor was the public health insurance system called the National Health Service[28].

William Beveridge was born in the family of a British colonial clerk in India. On graduation from Charterhouse School in Great Britain, and then Balliol College at Oxford, he obtained a baccalaureate degree in law. Then he developed interest in social problems and started publishing

21 Ratajczak J. (2004), p. 241.
22 Börsch-Supan A. H. and Wilke Ch. B. (2006), p. 574.
23 The Bavarian chemists' fund was established as the first one (*Bayerische Apothekerversorgung*). Cf.: *75 Jahre Bayerische Apothekerversorgung* (2000), http://www.abv.de/download/beckstein.pdf, accessed 27 December 2007.
24 Börsch-Supan A. H. and Wilke Ch. B. (2006), p. 574.
25 Schmähl W. (2005), p. 115.
26 At present, this city is located in Bangladesh.
27 Beveridge W. (1942).
28 *Wielka Encyklopedia PWN* (2001), v. 3, p. 504.

articles on unemployment in the *Morning Post*. His crowning achievement was his work of 1908 entitled *Unemployment: A Problem of Industry*.

In 1909 Beveridge was appointed a director of Labour Exchanges, and next he participated in conceptual work on creating National Insurance Act of 1911. During World War I, he was in charge of mobilization and supplies of the army. After the war he was ennobled and became a lord. In 1919, recommended by the socialist Fabian Society, he obtained the post of the headmaster of the London School of Economics and Political Science (LSE). Until the end of his life, Lord Beveridge was under a significant influence of Fabian ideas. In 1924 he published the thesis *Insurance for All*, in 1928 *British Food Control*, and in 1936 *Planning under Socialism, and Other Addresses*. In 1937 Beveridge graduated from University College in Oxford, where he was appointed a professor in the same year. In 1941 the British government commissioned Beveridge to prepare a report answering the question what form the social insurance system should assume after the war.

In the report submitted to the Parliament in 1942, Beveridge stipulated that all those employed would pay a weekly fee called national insurance. In return, they were to get from the state financing of the risk of disease, unemployment, old age and widowhood. Beveridge claimed that this system was supposed to provide for a minimum standard of living for everybody. He said that the state duty was to fight the five Giant Evils: want, disease, ignorance, squalor and idleness. These all was expected to contribute to the welfare state. The climax of the Fabian project was the National Health Service (NHS), whose responsibility was to secure medical care and necessary rehabilitation to all citizens.

In 1944 Beveridge drew up the next report, this time concerning unemployment, entitled *Full Employment in a Free Society*, in which he pondered on the possibility to attain full employment in the British economy, understood as the unemployment rate not higher than 3%. In the report he advocated applying Keynes' ideas of state interventionism with reference to job creation and production control.

In 1945 Beveridge, who joined the Liberal Party[29], was elected to the House of Commons. In 1946 he became Baron Beveridge in Tuggal in the County of Northumberland, and the potential leader of the Liberal Party to the House of Lords from this County. In the subsequent years, the Labour Prime Minister Attlee announced introduction in Great Britain of the Welfare State according to Beveridge's recommendations. Beveridge's last work was *Pillars of Security* published in 1948.

Sir William Beveridge died childless on 16 March 1963 and was buried in Throckington.

### 1.2.2 Historic background

The British pension system dates back to the beginning of the 17th c., when in 1601 the Elizabethan law on relieving the poor was introduced[30], which obliged parishes to take care of the poor. The first occupational pension system for civil servants was created in 1810, yet it concerned only those who had become disabled. The pension system, which covered all civil servants with at least 45 years in employment, was established in 1834[31]. It granted non-contributory pensions to civil servants in the amount of 1/60 of the last remuneration for each year of service[32]. The first occupational pension schemes for blue-collar workers were created in the middle of the 19th c.[33]. 1897 brought the first legislation on accident insurance[34]. The Pension Act of 1908 introduced the first state pensions for all the poor with the annual income of 31 pounds who turned 70[35], and were defined as those in need. This morality test concerned three elements: 1) not receiving aid pursuant to the relief act in the last 10

29 The party was at that time liberal only by name, and its ideology was social-liberal. In 1988 it merged with its close ideological ally, i.e. the Social Democratic Party, into the Liberal Democratic Party.

30 Wiśniewski J. (2005), p. 61.

31 Schulze I., Moran M. (2007b), p. 60.

32 Czajka Z. (2003), p. 194.

33 Schulze I., Moran M. (2007b), p. 60.

34 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 333.

35 Schulze I., Moran M. (2007b), p. 59.

years, 2) not being imprisoned, and 3) being employed. Pensions were non-contributory, fully tax-financed[36]. In 1911 the first legislation on health and unemployment insurance was enacted[37]. 1925 was the year of passing the act on contributory pensions for widows, orphans, and the elderly, which provided for contribution-financed pension benefits for those aged between 65 and 70[38]. The pensions were paid weekly in the fixed amount of 10 shillings for a single person and 1 pound for married persons. Those over 70 were still receiving pension under the law of 1908. In 1936 as much as 6,544 employers offered occupational pension schemes with over 1.6 million participating employees[39]. However, in 1938, only 18% of the working population received additional company pension[40]. The act of 1940 decreased the retirement age for women from 65 to 60 years of age[41], and introduced a new pension benefit in the form of a supplementary pension. The solutions adopted in Britain resulted in a wide diversity of benefits for the diseased, disabled, unemployed, and elderly. There were three different benefits for the unemployed, and three kinds of pensions. There were separate regulations for the blind, the disabled, and the civilians wounded in bomb attacks during the war. Benefits and pensions were of different values, and seven ministries were in charge of them. The system was receiving constant criticism from trade unions. In this situation, in 1940 Ernest Bevin, the Minister for Labour, asked Sir William Beveridge to scrutinize the British social insurance system and recommend changes. A year later the British government formally commissioned Beveridge to write a report on the future of the social insurance system after World War II.

[36] Czajka Z. (2003), p. 194.
[37] *Social Security Programs Throughout the World: Europe, 2006* (2006), pp. 331 and 334.
[38] Żukowski M. (2004), p. 308.
[39] Schulze I., Moran M. (2007b), p. 60.
[40] Czajka Z. (2003), p. 200.
[41] Schulze I., Moran M. (2007b), p. 59.

### 1.2.3 Main elements of the pension concept

The Beveridge's model proposed in 1942, as far as pensions were concerned, stipulated charging a fixed weekly contribution from each working person, and paying pension benefits also on a weekly basis and of a fixed value to every person who reached the age required by law and had insufficient resources to provide for him- or herself. The contribution thus took on the character of a tax charged from all those in employment, while the pension was more of a benefit for those in need.

### 1.2.4 Implementation and development

The assumptions of the Beveridge's model were enforced between 1945 and 1948. As early as in 1945 the first legislation on family benefits was introduced[42], and in 1946 – on accidents at work and pensions[43]. Basic State Pension (BSP) was financed by contribution of the value fixed for each insurance group. Employees were grouped according to age, sex, marital status, and professional position. Contributions were transferred to the National Insurance Fund (NIF), which from the very beginning took on the pay-as-you-go formula[44]. Pension value was fixed at a weekly amount of 24 shillings. In 1948 the National Health Service was established along with the act on social insurance.

## 1.3 MILTON FRIEDMAN AND JOSÉ PIÑERA'S PENSION CONCEPT

### 1.3.1 Biographies

**Milton Friedman** – born on 31 July 1912 in New York; an American economist, the author of monetarism, the winner of the Alfred Nobel Bank of Sweden Award for the Economy in 1976, a fervent supporter and promoter of free market. In his book *Capitalism and Freedom* of 1962,

[42] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 335.
[43] Hill M. (2002), p. 39.
[44] *Social Security Privatization: Experiences Abroad* (1999), p. 28.

he proposed to minimalize the role of government in the free market economy, in order to secure political stability and freedom. His book *Free to Choose*[45], filmed in 1980, had a huge impact on the development of anti-social attitudes[46].

Born in the family of Jewish immigrants from a Hungarian town of Beregszász[47], he studied at Rutgers University in New Jersey, followed by the University of Chicago. From 1935 he worked for government institutions, first in the National Resources Committee, and from 1937 in the National Bureau of Economic Research, actively implementing the rules of New Deal. In 1946 he was granted a Ph.D. in economics at Columbia University. From 1948 the professor of the University of Chicago of many years' standing, regarded as one of the main figures of the Chicago School of Economics. In the 1950s he departed from Keynesianism and regarded money supply as the main factor influencing the GDP, while attributing to inflation only the role of a monetary phenomenon. He advocated that money supply be increased at the ratio relevant to the GDP growth. This was supposed to secure economic stability. In 1957 he published the work on the theory of consumption entitled *A Theory of the Consumption Function*, in which he undermined the Keynes' idea of countercyclical actions by government spending. In the 1960s he led a dispute on the concept of Negative Income Tax (NIT), which meant subsidizing those who earned the least. That was what he considered to be a significant factor for the economic stability. In 1962 he published *Capitalism and Freedom*, co-authored with his wife Rose Friedman, and in 1963 *A Monetary History of the United States 1867-1960* written in cooperation with Anna Jacobson Schwartz, in which he presented the main theses of monetarism. As a supporter of free competition, he objected to the state interference in the economy. In 1975 Friedman stayed in Chile, where he delivered a series of lectures on economy[48].

45 Co-authored by him and his wife – Rose Friedman.
46 *Wielka Encyklopedia PWN* (2002), v. 9, pp. 390-391.
47 Presently, this town is located in Ukraine and its name is Berehove.
48 Soon, the Chilean government, a strong supporter of Friedman's ideas, led by general Pinochet, was helped by many economic advisors of Chilean origin from the Chicago

In 1976 he was awarded the Nobel Prize for his achievements in the fields of consumption analysis, monetary history and theory, and for his demonstration of the complexity of the stabilization policy. In 1984 he and his wife Rose co-authored the famous *Tyranny of the Status Quo*, in which he proved that crucial political changes needed to be radical and immediate.

Friedman was a member of the President's Economic Policy Advisory Board of the presidents: Nixon and Reagan. In 1988 he was honoured with the Presidential Medal of Freedom and the National Medal of Science. He died on 16 November 2006 in hospital in San Francisco due to cardiological failure.

**José Piñera Echenique** – born on 6 October 1948 in Santiago; the Chilean economist and a specialist in pension insurance.

Piñera studied at the Catholic University of Chile. In 1974 he was granted a Ph.D. in economics at Harvard University. In the Chilean government of general Pinochet, from 1978 to 1980, he was the Minister for Labour and Social Security, and between 1980 and 1981 the Minister of Mining. Thus, he was responsible for the three structural reforms, including creation of the pension scheme based on private personal accounts.

### 1.3.2 Historic background

The Republic of Chile was proclaimed in 1818, and in 1924 it was the first country on the western hemisphere to introduce a repartition pension scheme[49]. Between 1938 and 1952 the left-wing parties, comprising the so-called people's front, participated in governing the country. In 1970 again the power was taken over by the coalition of left-wing parties and the Communist Party of Chile. The communist Salvador Allende Gossens[50]

School of Economics. This group of Chilean economists was dubbed the Chicago Boys.

49 Ambachtscheer K. P., Ezra D. D. (2001), p. 224.

50 Later, on the basis of the so-called Mitrochin Files, it was discovered that Salvador Allende Gossens had been an agent hiding under a pseudonym of 'Leader', who had cooperated with the Soviet KGB. Cf.: *How 'weak' Allende was left out in the cold by the KGB* (2005).

became a President. During his tenure, the agrarian reforms sped up, and banks and some industrial companies were nationalised. These all contributed to mass strikes. Allende decided to conduct a plebiscite, in which citizens were supposed to vote for or against continuing his office. The date of the plebiscite was supposed to be announced on 11 September 1973. However, on 11 September 1973 the military *coup d'etat* was organized under the leadership of general Augusto Pinochet. Allende died in mysterious circumstances. Under the Pinochet's military regime the Parliament was dissolved, the activities of political parties were banned, and left-wing activists were persecuted. Simultaneously, the policy of economic neoliberalism was implemented, and the Chilean market opened to foreign capital. The hitherto pension system was marred by inefficient administration, as well as the fact that there was no connection between the value of the contributions paid and the inflation rate. In 1980, the hidden social insurance system debt in Chile equalled 80% of the GDP. Contributions remained at the level of 33% of remunerations[51]. Thus, there was a need for new ideas, which were found in Milton Friedman's pension concept. The logic of Friedman's way of thinking can be summarised in the sentence: the worldwide demographic trend is characterised by a downward tendency in birth rates, while medical developments result in increasing lifespans. As a result, the number of those working for the sake of pensioners is decreasing in relation to the number of pensioners. As it is impossible to raise a retirement age and contributions infinitely, sooner or later the amount of benefits will have to be cut down, which is in fact a beginning of the bankruptcy of the system[52].

### 1.3.3 Main elements of the pension concept

The scheme planned pension contributions from the minimum of 10% to the maximum of 20% of remunerations. They were supposed to be transferred to pension accounts of the participants of the system. Private

[51] Gill I. S., Packard T. Yermo J. (2005), p. 23.

[52] http://www.josepinera.com/pag/pag_tex_penschile_po.htm, accessed 21 February 2008.

pension funds would manage the assets. They would compete to attract clients following the free-market rules. The funds would invest in capital markets in market portfolios, consisting of shares and bonds. Participation in the new scheme was voluntary for all those already employed at the moment of the system introduction. However, all the new employees were automatically enrolled in the new system. Concurrently, the back liabilities of the old system would be paid from emission of special treasure bonds, with the annual interest rate of 4.0%. The bonds would be located on all individual accounts of all the beneficiaries of the new system. Securitized state pension debt to those insured would be repaid in subsequent years from the budget surplus and from revenue from privatization. The replacement rate was assumed as 70% after 20 years of participation in the system, considering a 10% pension contribution and a 4% average profit from capital investment.

A retirement age was planned as 65 for men and 60 for women. Yet, it was not a key factor in the private pension scheme, as opposed to the repartition system, where it is a constant subject of political bargaining. First, employees are allowed to continue work after reaching a retirement age. Even if they choose to do so, they can receive pensions from their own accounts, without an obligation to contribute additionally to these accounts. Secondly, those employees who would manage to accumulate assets which are sufficient for a 'sufficient pension', as defined by law, which is 50% of the average remuneration from the last ten years but more than the minimum pension, they may retire at any chosen time, even much earlier than the defined retirement age. Thus, the 65/60 age limit in by no means an obstacle for employees. The employee has to save 10% of his or her remuneration in the pension account until he reaches a retirement age unless he manages to accumulate assets sufficient for an early retirement. Still early retirement means 'retirement' of his or her money rather than retirement of the employee as he may continue work. However, only after reaching the age of 65/60 can the employee get a subsidy from the state budget to achieve the minimum pension level.

Pension payments would assume two forms. The first one is the purchase of guaranteed lifelong pension from the registered private insurance company. This pension would secure a steady monthly income until the end of life, adjusted to the inflation rate (since the bonds which are adjusted to the inflation rate are easily accessible on the Chilean capital markets, the requirement to adjust pension to the inflation rate is not difficult for insurance companies), as well as a widow's pension and an orphan's pension in the case of the death of an employee. Another option is to leave assets on the account and withdraw money pursuing a previously-planned programme. The programme is based on the life expectancy of the employee and his or her dependants. In this case, the assets accrued on the employee's account in the pension fund are considered his or her estate and can be left to his or her family. In both options mentioned above, the employee who collected more assets than is necessary to buy a lifelong pension for himself and his or her dependants, which is 70% of his or her last average remuneration, may withdraw the surplus above this level at any time. Outside the system would remain only pension schemes for the army, managed by the National Defence Pension Institution (*Caja de Prevision de la Defensa National*, CAPREDENA), and the police, managed by the Chilean Carabiniers Pension Institution (*Direccion de Prevision de Carabinieros de Chile*, DIPRECA)[53].

### 1.3.4 Implementation and development

On 4 November 1980, after almost two years of work of José Piñera's team, Chilean government adopted a package of the three following Acts[54]: 1) the first one[55] introduced the national mandatory system of personal pension accounts, which was also a base for establishing the Pension Funds Management Board (*Administradoras de Fondos de Pensiones*, AFP), 2) the second one[56] introduced transition from the old pay-as-you-go system to the new one, and also allowed employees to

53 de Mesa A. A. (2005), p. 88.
54 http://www.josepinera.com/icpr/pag/pag_jp.htm, accessed 21 February 2008.
55 Del Decreto ley N° 3.500, de 1980 *Regimen de Previsión Social Derivado de la Capitalización Individual Establece Nuevo Sistema de Pensiones*.
56 Del decreto ley N° 3.501, de 1980 *Fija Nuevo Sistema de Cotizaciones Previsionales y Deroga Disposiciones Legales que Indica*.

transfer their health insurance to the private insurance company – the future *Instituciones de Salud Previsional* (ISAPRE) system, and 3) the third one[57], which rationalized the functioning of the present system and established the state *Instituto de Normalización Previsional* (INP), which was supposed to serve pension payments as well as the remains of the pay-as-you-go system with reference to all those who from 1 May 1981[58] chose to stick to the old pension scheme[59]. The 1st pillar would comprise two elements[60]: the 1st one was the non-contributory public scheme providing the social pension (*pensiones asistenciales*, PASIS), and the 2nd one was the State Guaranteed Minimum Pension for the 2nd pillar participants (AFP), who paid pension contributions for at least 20 years[61]. Similarly to the 2nd pillar, the 3rd pillar was based on individual pension accounts; however, in contrast to the 2nd pillar, it was a voluntary system, accompanied by tax relief for its participants. When the new system was introduced, 12 private pension funds (AFPs) emerged. Supervision of the 2nd pillar was conducted by the state Supervision of Pension Funds Management Boards (*Superintendencia de Administradoras de Fondos de Pensiones*, SAFP). Mandatory pension contributions to AFPs equalled 10% of remunerations, yet the employee could save additional 10% to AFPs, and take advantage of the tax relief, up to the legally allowed level of 20% of the remuneration. Each employee received an AFP savings book and a full statement of his or her account every three months, which

57 Del decreto ley N° 3.502, de 1980 *Crea Instituto de Normalizacion Previsional*.

58 José Piñera endowed the choice of the date with a symbolic meaning: *In Chile, as in most countries in the world, except the United States of America, 1 May is celebrated as the Labour Day. We chose that day as the birthday of the new system purposefully. Symbols are important in the life of the society. Thanks to the reform, Chilean employees can celebrate 1 May not as the day of class conflict, but as the day of the freedom of choice of their own pension, freedom from the nightmare of the old bankrupt social insurance system.* Cf.: http://www.josepinera.com/icpr/pag/pag_jp.htm, accessed 21 February 2008.

59 The old scheme should finally finish with regard to the payment of contributions in 2025, and with regard to the payment of benefits around 2050.

60 de Mesa A. A. (2005), pp. 88-89.

61 The State Guaranteed Minimum Pension was paid to the participants of the 2nd pillar, and was financed from the state subsidy to the AFP to individual accounts of those participants who failed to collect sufficient assets to receive the minimum pension.

showed how much money was accumulated on his or her account and how much he or she had gained through capital investment. Capital gains were not taxable, while pensions were taxed according to the general rules. 23% of the participants of the old system immediately joined the new system[62].

Between 1981 and 1997, the average rate of return from the new system assets remained at 12% annually, with the average portfolio structure with 35% of shares and 65% of bonds. In 1997 only 7% of the initial number of those insured remained in the old scheme[63]. At the end of 2007, after the consolidation processes, there were only 6 AFPs on the market[64].

The Chilean model was emulated in many a country of Latin America[65], Eastern and Central Europe[66], and Asia[67]. In Bolivia and Salvador it was implemented in its exact original shape[68].

## 1.4 THE WORLD BANK PENSION CONCEPT

### 1.4.1 The history of the organization

The International Bank for Reconstruction and Development (IBRD), commonly referred to as the World Bank, was established at the conference

62 Ambachtscheer K. P., Ezra D. D. (2001), p. 225.

63 Ambachtscheer K. P., Ezra D. D. (2001), p. 225.

64 These were: 1) A.F.P. Bansander S.A., 2) A.F.P. Cuprum S.A., 3) A.F.P. Habitat S.A., 4) A.F.P. Planvital S.A., 5) A.F.P. Provida S.A. and 6) A.F.P. Santa María S.A. Cf.: http://www.safp.cl/573/propertyvalue-1791.html, accessed 31 March 2008.

65 In South America, the first countries to introduce the Chilean developments (1980/1981) were Peru (1992), Argentina (1993/1994), and Columbia (1993/1995), followed by Uruguay (1995/1996), Mexico (1995/1996), Bolivia (1996), Costa Rica (2000), Ecuador (2001), Dominicana (2001), and Nicaragua (2004). Cf.: Grushka C., Demarco G. (1998), pp. 12, 23, 25 and 26, and *Pension Reform and the Development of Pension Systems. An Evaluation of World Bank Assistance* (2006), p. 66.

66 Latvia (1996), Hungary (1998), Sweden (1999), Poland (1999), Bulgaria (2000), Macedonia (2000/2002), Russia (2002), Croatia (1998/2002), Lithuania (2002/2004), Ukraine (2004), Slovakia (2004), and Romania (2004/2008). Cf.: *Pension Reform and the Development of Pension Systems. An Evaluation of World Bank Assistance* (2006), p. 66.

67 Kazakhstan (1998).

68 Gill I. S., Packard T., Yermo J. (2005), p. 23.

in Bretton Woods in July 1944, but it started operating on 25 June 1946. The main premise for its creation was to reconstruct Europe and Japan, which were destroyed during World War II. The important statutory aim was also to support the developing countries of Asia, Latin America, and Africa. Presently, the Bank comprises 185 member countries[69].

The so-called World Bank Group consists of five organizations: 1) the International Bank for Reconstruction and Development, 2) the International Finance Corporation (IFC) established in 1956, 3) the International Development Association (IDA) established in 1960, 4) the International Centre for Settlement of Investment Disputes (ICSID) established in 1965, and 5) the Multilateral Investment Guarantee Agency (MIGA), established in 1988. The World Bank is not a bank in the literal meaning of the word. It provides long-term loans with preferential interest for the most needy member countries and public companies (after receiving their government guarantees), as well as subsidies, and technical support. At present, the aim of these activities is to curb poverty, and to finance the development of such areas of social life as health care, education, environmental protection, and infrastructure. In return, the Bank requires some political steps such as fighting corruption, the development of democracy, or, last but not least, the development of the private sector of the economy.

The money for loans to less developed countries comes from contributions and debts paid by the member states, and from issuing bonds on the world capital markets.

### 1.4.2 Historic background

The demographic tendencies unfavourable for pension systems such as increasing lifespans accompanied by a dramatic fall in birth rates in the early 1990s led the World Bank economists to conclusion on inevitable bankruptcy of pension schemes based on the pay-as-you-go formula.

69 http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/0,,contentMDK: 20103870~menuPK:1697011~pagePK:51123644~piPK:329829~theSitePK:29708,00.html, accessed 26 February 2008.

Simultaneously, they considered it essential to diversify the sources of financing pensions. This in turn led to the concept of the three-pillar pension scheme, which to smaller or greater extend was based on the ideas of Bismarck, Beveridge and Friedman-Piñera.

### 1.4.3 Main elements of the pension concept

The concept of dividing pension schemes into pillars was for the first time proposed in the World Bank's publication of 1994 entitled *Averting Old Age Crisis,* which marked the beginning of the multi-pillar concepts comprising three pillars[70]: 1) the 1st mandatory pillar, acting as a public programme financed from taxes and aiming at poverty prevention; 2) the 2nd mandatory pillar, connected with capital markets, managed by private companies, and based on individual savings accounts or plans related to employment; and 3) the 3rd pillar, voluntary, supplementary, also connected with locating assets on capital markets, and implemented in the form of personal savings or plans related to employment. In the World Bank's proposal, the relation between the 1st and the 2nd pillar could assume four forms[71]: 1) mandatory individual savings plan with the public scheme of fixed benefits; 2) mandatory individual savings plan with the public scheme ensuring guaranteed minimum pensions; 3) mandatory plan related to employment with the public scheme of fixed benefits; and 4) mandatory plan related to employment with the public mean-tested scheme. Pursuant to the convention proposed in this document, pension schemes recommended by the World Bank should comprise three pillars: 1) the 1st one, mandatory, traditional, publicly managed; 2) the 2nd one, mandatory, based on individual assets and investments in capital markets; and 3) the 3rd one, absolutely voluntary, based on personal providence of the participants of the system, taking advantage of financial engineering instruments available on the market.

70 *Averting the Old Age Crisis* (1994).
71 *Pension Reform and the Development of Pension Systems. An Evaluation of World Bank Assistance* (2006), p. 4.

### 1.4.4 Implementation and development

In the 1990s and in the early 2000s, the three-pillar system was introduced in many a country of South America, the Caribbean Islands, and Europe. The system based on individual contribution record in the 1st pillar (non-financial defined contribution, NDC) was first implemented in Argentina in 1994, and in Europe in Latvia and Italy in 1996. The full three pension pillars were first implemented in Europe in Sweden, Poland, and Hungary. Recently, the World Bank discarded the commonly-used idea of pillars for the benefit of the term: pension scheme layers[72].

## 1.5 THE PENSION CONCEPT OF THE EUROPEAN UNION

### 1.5.1 The history of the organization

**The European Union** is an economic and political union of 27 European countries[73], resulting from a long-lasting process of political, economic, and social integration; it is the largest, the most thriving, and unique organization of this kind in the world[74].

At the moment of writing this book, the EU had no legal personality. Its functioning was based on the European Union Treaty (the current version in the Nice Treaty of 2001), as well as the European Community Treaty (the current version in the Nice Treaty of 2001)[75].

The EU is based on **three pillars**, which are: 1) the European Communities, 2) the Common Foreign and Security Policy, and 3) the Police and Judicial Co-operation in Criminal Matters.

72 Whitehouse E. (2007), p. 5.

73 http://europa.eu/, accessed 6 March 2008.

74 It is the *sui generis* case in international relations. It is a combination of supranational and intergovernmental structures. It is characterised by the qualities of both an international organization and a confederation or even a federative state. The theoreticians of law, political sciences and international relations are still involved in the dispute as to the nature of the EU. Some view it as a state, while others prove that it means only co-operation between the Member States. There are clashes between contradictory visions of the Member States (the British vision, the French one, the German one, the Scandinavian one), as well as political doctrines.

75 *Wielka Encyklopedia PWN* (2005), v. 28, pp. 298 and further.

**The 1st pillar** of the EU, which is **the European Communities**, i.e. the European Community and the European Atomic Energy Community (EURATOM), has been being built since 1951.

On 18 April 1951, the representatives of six European countries, i.e. Belgium, France, the Netherlands, Luxembourg, the Federal Republic of Germany, and Italy, under the intergovernmental agreement in Paris, signed a treaty on establishment of the European Coal and Steel Community (French: *Communauté Européenne du Charbon et de l'Acier*, CECA) for 50 years. The Treaty was implemented on 23 July 1952. The Organization assumed a legal personality and was based in Luxembourg.

At the conference in Messina in 1955, it was decided that **the European Atomic Energy Community (EURATOM)** be created; yet, its formal establishment took place as late as in 1957.

Pursuant to the Treaties of Rome, signed on 25 March 1957 by Belgium, France, the Netherlands, Luxembourg, the Federal Republic of Germany, and Italy, two entities were created: the European Economic Community (EEC) and **the European Atomic Energy Community (EURATOM),** which started their activities on 1 January 1958. Under the Merger Treaty of 25 March 1957 on common organs[76] of the European Communities[77], the Parliament and the Court of Justice were set up.

On 30 July 1962, the EEC started common agricultural policy, with a view to controlling food production.

Pursuant to the Merger Treaty of 1967, all the three Communities existing then (the European Coal and Steel Community, the European Atomic Energy Community, and the European Economic Community) gained other common organs: **the Council of the European Communities** and **the European Commission**.

On 1 July 1968, the six EEC countries mutually abolished duties on imported goods, which, for the first time, enabled free trade.

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76 The so-called First Merger Treaty.

77 That is: the European Coal and Steel Community, the European Economic Community, and the European Atomic Energy Community.

In 1973 three more countries joined the EEC: Denmark, Ireland, and Great Britain, followed by Greece in 1981.

On 14 June 1985, in the town of Schengen in Luxembourg, the agreement was signed to abolish the control of those who cross the borders between the Member States. In return, it tightened co-operation on safety and asylum policies. The agreement was called **the Schengen Agreement**.

On 17 February 1986[78], the Single European Act was signed in Luxembourg, which changed the provisions of the Rome Treaties. Also in 1986, Spain and Portugal joined the EEC.

On 3 October 1990, the Federal Republic of Germany expanded to cover also the East Germany, which meant enlargement of the EEC.

On 7 February 1992, in Maastricht **the Treaty on the European Union** was signed, which changed the provisions of the Rome Treaties. Pursuant to its provisions, at the beginning of 1993 the name: the European Economic Community was changed to **the European Community** (EC) (French: *Communauté européenne*, CE). On 1 January 1993, free movement of goods, services, people and capital was introduced. On 1 November 1993, based on three pillars[79], **the European Union** was created.

On 1 January 1995, the EU accepted new members: Austria, Finland, and Sweden. On 26 March 1995, **the Schengen Area** came into force, comprising Belgium, France, Spain, the Netherlands, Luxembourg, Germany, and Portugal, which was connected with abolishing the borders between these countries.

On 2 October 1997, the Amsterdam Treaty was signed. It was an attempt at reforms, which allowed for the EU enlargement[80]. On 26 October 1997, **the Schengen Area** included Italy, and on 1 December 1997 also Austria.

78 Italy, Greece, and Denmark signed it as late as on 28 February 1986.

79 The EU pillars mentioned before are: 1) the European Communities, 2) the Common Foreign and Security Policy, and 3) police co-operation (Europol) and judicial co-operation (Eurojust).

80 The Treaty came into force on 1 May 1999.

On 1 June 1998, **the European Central Bank** was established, and on 1 January 1999 **the Economic and Monetary Union** was set up, with the common currency, which was the euro. At first, it comprised: Austria, Belgium, Finland, France, Spain, the Netherlands, Ireland, Luxembourg, Germany, Portugal, and Italy[81]. On 1 January 2001, Greece joined **the Economic and Monetary Union**. On 26 February 2001 in Nice the treaty was signed entitled *The Treaty of Nice Amending the European Union Treaty, the European Community Treaty and Other Related Legislation*. The Treaty provided the rules for functioning of the Union after accession of other countries to the total of 27.

The Treaty on the European Coal and Steel Community expired on 23 July 2002, and its competencies were taken over by **the European Community**.

On 16 April 2003, the Athens Treaty was signed, which was the legal basis for the accession of 10 countries from the Central and Southern Europe. On 1 May 2004, **the European Community** was accessed by: Cyprus, the Czech Republic, Estonia, Hungary, Lithuania, Latvia, Malta, Poland, Slovakia, and Slovenia. Since 1 January 2007, Bulgaria and Romania have been the members of **the European Community**, and Slovenia – a member of **the Economic and Monetary Union**. On 13 December 2007, in Lisbon *the Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community* was signed, also called the Reform Treaty. On 21 December 2007, the following countries joined **the Schengen Area**: the Czech Republic, Estonia, Hungary, Lithuania, Latvia, Malta, Poland, Slovakia and Slovenia.

Since 1 January 2008, Cyprus and Malta have been the members of **the Economic and Monetary Union**.

[81] Moreover, 3 non-EU countries signed agreements on joining the Economic and Monetary Union and participating in common monetary policy, including introduction of the euro: Monaco, San Marino, and the Vatican.

**The Lisbon Treaty** is supposed to take effect on 1 January 2009 as long as it is ratified by all the parties, and the ratification documents are deposited with the Italian government[82].

**The 2nd pillar** is **the Common Foreign and Security Policy (CFSP)**, which was adopted under the Maastricht Treaty of 1992, and then developed under the Amsterdam Treaty of 1997.

European co-operation in foreign policy and safety started in 1970 with the creation of the European Political Co-operation (EPC).

Under Title V of the Maastricht Treaty, the European Political Co-operation was replaced by the 2nd pillar of the EU, which was **the Common Foreign and Safety Policy**. The Treaty came into force on 1 November 1993. Article 11 states the following five aims of this policy:

- to safeguard the common values, fundamental interests, independence and integrity of the Union in conformity with the principles of the United Nations Charter,
- to strengthen the security of the Union in all ways,
- to preserve peace and strengthen international security, in accordance with the principles of the United Nations Charter, as well as the principles of the Helsinki Final Act of 1975 and the objectives of the Paris Charter of 1990, including those on external borders,
- to promote international co-operation,
- to develop and consolidate democracy and the rule of law, and respect for human rights and fundamental freedoms.

The Amsterdam Treaty of 1997 introduced the enhanced co-operation, and the Nice Treaty of 2001 allowed for its implementation within the framework of **the Common Foreign and Safety Policy**. The Nice Treaty officially established the Political and Security Committee (PSC). It consists of representatives of the Ministries for Foreign Affairs of the Member States. Its main duties are:

82 Due to the rejection of the Lisbon Treaty by Ireland, in the referendum, which took place on 12 June 2008, the ratification, and the implementation of the Treaty became legally impossible.

- to monitor international situation with reference to **the Common Foreign and Safety Policy**,
- to contribute to the general direction of **the Common Foreign and Safety Policy**,
- to monitor implementation of the European Council decisions.

**The 3rd pillar** of the European Union is **the Police and Judicial Co-operation in Criminal Matters**, which is concentrated on combating crime. This pillar was established under the Maastricht Treaty of 1992. Its first name was: the Justice and Home Affairs (JHA). It concerned the problems of immigration, organized crime, terrorism, social pathology, as well as visas and asylums. Pursuant to the Amsterdam Treaty of 1997, some of these policies (visas, asylums, immigration and others related to free movement of people) were transferred to the 1st pillar, which is how unification of some part of this pillar took place. Thus, all these issues came under the jurisdiction of the Court of Justice, and the name of the pillar was changed to **the Police and Judicial Co-operation in Criminal Matters**.

The beginnings of the 3rd pillar are connected with the Dublin Convention, which was the agreement signed within the framework of the European Commission on 15 July 1990[83], on the rules of streamlining the application process for refugees seeking political asylum by the European Community Member States. It comprised the definitions of such notions as: entry visa, transit visa, alien, application for asylum, and residence permit[84].

Establishment of the Europol was provided for by the Maastricht Treaty of 1992. On 3 January 1994, limited operations were started by the police agency based in the Hague named the Europol Drugs Unit (EDU). In 1998 the Europol Convention was ratified and came into force. **The Europol**, or **the European Police Office**, started work on 1 July 1999. Its aim is to improve the effectiveness of operations and co-operation

83 It came into force on 1 September 1997.

84 Pursuant to the Amsterdam Treaty of 1997, this area was included in the 1st pillar of the European Union.

between the competent authorities of the Member States in the area of prevention and fighting organized international crime. Its mission is to contribute to the EU law enforcement with reference to this kind of crime.

Between 15 and 16 October 1999, at the meeting of the European Council in Tampere the decision was made to establish **the European Police College (CEPOL)**. At first, the CEPOL was acting pursuant to the European Council decision on 22 December 2000, which was abolished by the Council decision of 20 September 2005, and today the CEPOL is acting pursuant to the latter. The aim of the CEPOL is to aid trans-border training of senior police officers by optimalizing and strengthening co-operation between competent national institutions and organizations. It supports and develops the European integrated approach to trans-border problems, which the Member States face while fighting and preventing crime, as well as maintaining public security, law and order.

At the same European Council meeting in Tampere between 15 and 16 October 1999, the decision was made to establish a body responsible for constant co-operation of public prosecutor's offices. On 14 December 2000, the European Council set up the Pro-Eurojust, which started its activities on 1 March 2001. From 2002 it took a form of **the European Bureau for Judicial Co-operation Enhancement Eurojust**. The Lisbon Treaty provides for transforming **the Eurojust** into the European Public Prosecutor's Office.

European co-operation concerning **the 3$^{rd}$ pillar** is also facilitated by **the European Arrest Warrant**, which is a simplified form of extradition. It allows to arrest the person suspected, accused of committing a crime or already convicted, and to extradite such a person to the country where the legal proceeding will take place or the punishment will be executed. The EAW was established by the framework decision of the European Council of 13 June 2002 on the European Arrest Warrant and extradition procedure between the Member States, which came into force on 1 July 2002.

### 1.5.2 Historic background

Before 2000, there were two EU directives on pensions and pension systems: the Council Directive 96/97/EC of 20 December 1996, amending the Directive 86/378/EEC on implementing equality between men and women in social insurance of employees[85], and the Council Directive 98/49/EC on 29 June 1998 on safeguarding the supplementary pension rights of employed and self-employed persons moving within the Community[86].

### 1.5.3 Main elements of the pension concepts

Since 2000, in view of the great diversification of the pension systems in the Member States, the European Union has been implementing the so-called Open Method of Co-ordination (OMC) of its pension systems. The use of the OMC to analyse pension insurance in the Member States was for the first time mentioned in the conclusion of the European Council meeting in Lisbon in March 2000. In June 2000 the Union report on adequate and sustainable pensions[87] was written, in which this possibility of applying the OMC to pension systems was mentioned for the first time. Pursuant to the Lisbon decisions, in October 2000, the European Commission created the framework for analysis of the pension problem in the Communication on the Future Evolution of Social Protection from a Long-Term Point of View[88]. The Document emphasised that the crucial factor for safe future of pension systems are not isolated reforms but sustained growth of the economy and employment. **Each member state makes an individual decision on what pension system to implement**. Yet, in view of the fact that all Member States face the same problems, it is purposeful to co-ordinate efforts and exchange information on current and prospective reforms.

85 *Official Journal L 046, 17/02/1997 P. 0020 – 0024.*

86 *Official Journal L 209, 25/07/1998 P. 0046 – 0049.*

87 *Adequate and Sustainable Pensions: A report by the Social Protection Committee on the future evolution of social protection* (2000).

88 *Communication from the European Commission – The Future Evolution of Social Protection from a Long-Term Point of View: Safe and Sustainable Pensions* (2000).

### 1.5.4 Implementation and development

At the European Council meeting in Götheborg in June 2001, the final decision was made to apply the OMC to pensions. The Economic Policy Committee and the Social Security Committee were obliged to prepare a joint report on the objectives and working methods in the area of pensions. The European Commission Communication published in June 2001 on supporting national pension strategies confirmed three basic aims formulated at the Götheborg summit, which should be implemented by pension systems in the long-term perspective[89]:

- to safeguard the capacity of pension systems to meet their social aims of providing safe and adequate incomes to retired persons,
- to ensure the financial sustainability of pension systems, so that the future impact of ageing does not jeopardise the long-term sustainability of public finances,
- to enhance the ability of pension systems to respond to the changing needs of society and individuals.

In November 2001 the report was drawn up on quality and viability of pensions[90], which was a joint report of the Economic Policy Committee and the Social Security Committee on applying the OMC to pensions. It was later adopted by the European Council in Laeken in December 2001. The next step was preparation of the national strategic reports by the Member States, until September 2002, on the future of their pension systems[91]. These reports contained the diagnoses of the crucial challenges, information on past and prospective reforms, as well as the data to consider average- and long-term effects of present policies. In November 2002 the European Commission employed the German company *Gesellschaft für*

89 *Supporting National Strategies for Safe and Sustainable Pensions through an Integrated Approach* (2001).

90 *Quality and Viability of Pensions – Joint Report on Objectives and Working Methods in the Area of Pensions* (2001).

91 These reports are accessible at: http://ec.europa.eu/employment_social/spsi/adequacy_sustainability_en.htm, accessed 6 March 2008.

*Versicherungswissenschaft und – gestaltung e. V.* (GVG) to submit a report on the social protection systems in the 13 applicant countries[92].

In 2003 the Directive 2003/41/EC of 3 June 2003 was published on the activities and supervision of institutions for occupational retirement provision[93].

The analysis of the national strategic reports and isolating good examples and innovative solutions were the Commission's aims. For the spring 2003 summit, together with the Council, they prepared the joint report evaluating the national pension strategies and isolating good examples[94]. It was the first substantial report in which pension schemes were analysed following the agreed structure: 1) the 1st one, on current and prospective replacement rates[95], in which replacement rates offered by the pension systems in the Member States were analysed; and 2) the 2nd one, on promoting longer working lives[96], in which the Member States were advised to encourage long professional activity. In February 2005 the report on privately managed pension benefits[97] was published, which touched on the issues concerning the expected rules of functioning of privately managed pension insurance institutions. In the middle of 2005, the new Member States presented their strategic reports, while the 'old' ones submitted their updates for the period of 2002-2005[98]. In May 2006 another report on replacement rates was drawn up[99], and in August 2006, on the bases of the national reports, the European Commission published

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92 *Study on the Social Protection Systems in the 13 Applicant Countries: Synthesis Report* (2002).

93 Directive 2003/41/EC of the European Parliament and of the Council of 3 June 2003 *on the activities and supervision of institutions for occupational retirement provision* Official Journal L 235, 23/09/2003 P. 0010 – 0021.

94 *Adequate and Sustainable Pensions: Joint Report by the Commission and the Council* (2003).

95 *Current and Prospective Pension Replacement Rates: Report on Work in Progress* (2004).

96 *Promoting Longer Working Lives Through Better Social Protection Systems: Report by the Social Protection Committee* (2004).

97 *Privately Managed Pension Provision: Report by the Social Protection Committee* (2005).

98 http://ec.europa.eu/employment_social/spsi/adequacy_sustainability_en.htm, accessed 6 March 2008.

99 *Current and Prospective Theoretical Pension Replacement Rates* (2006).

the second synthesis report on social security in the European Union, with special emphasis on pensions[100]. In December 2006 the document on minimum pensions was written[101], in which for the first time the relation between minimum pensions and old-age poverty prevention was pointed out. In April 2007 the first part of the report on promoting longer working lives and flexible retirement was published[102].

[100] *Adequate and Sustainable Pensions: Synthesis Report 2006* (2006).

[101] *Minimum Income Provision for Older People and their Contribution to Adequacy in Retirement* (2006).

[102] *Promoting Longer Working Lives through Pension Reforms. First Part: Flexibility in Retirement Age Provision* (2007).

# Chapter II
# PRESENTATION OF PENSION SYSTEMS

Globalization, development of transportation and telecommunications, information technology solutions, and free movement around Europe, all these factors lie at the roots of an increasing interest in the possibility of earning a living in a country other than the homeland. This, in turn, may entail participation in pension systems of foreign countries. These systems fluctuate, mainly due to demographic changes, but also as a result of economic alterations. The European Union, a domineering structure on the map of Europe, stipulates applying the Open Method of Co-ordination to the pension-related issues, therefore, it is far from imposing a one correct solution. Hence a resultant huge variety of these systems and a micro knowledge about them, even among specialists. The historic development of pension systems as well as their present state in the 27 European Union countries presented further in this chapter should contribute to an increase in the knowledge of this field and be a contribution to a discussion, which will hopefully lead to the selection of the best systemic solutions. Each subchapter starts with general information about the country. The countries are presented in the alphabetical order, from Austria to the United Kingdom.

## 2.1 AUSTRIA

### 2.1.1 General information about the country

The Republic of Austria[1] (*die Republik Österreich*) is a landlocked country located in central Europe. It is a federal republic, comprised of 9 federal states (*Bundesländer*), which in turn are subdivided into 15 municipal and 84 rural districts, and 2,359 communes.

1 *Wielka Encyklopedia PWN* (2001), v. 2, pp. 502 and further.

The official language of the whole of the country is German; whilst Slovenian is the official language in Carinthia and Croatian and Hungarian in Burgenland. The largest ethnic group were the Austrians (91.1% of the population); the largest religious group were the Catholics (73.6% of the population).

According to the Constitution of the country (accepted in 1920, then changed in 1929 and 1945), the head of the state is the President, and the government is lead by the Chancellor.

In 1995 Austria became a member of the European Union, and in 1999 it joined the Economic and Monetary Union and replaced the Austrian shilling with the euro[2].

The current currency in Austria is the euro.

The GDP *per capita* (PPP) was estimated in 2007 at US$39,000, with a growth rate of 3.3%, and the public debt was 61.0% of the GDP.

The current national balance at the end of 2007 showed the surplus of US$12.61 billion. The unemployment rate was 4.3%.

In July 2007 the population of Austria[3] was 8,199,783 people, with the following age groups: 0-14 years of age – 15.1%, 15-64 years of age – 67.5%, 65 years of age and older – 17.5%. The overall life expectancy at birth was 79.21 years: 76.32 years for men and 82.26 years for women.

### 2.1.2 Historic development of the pension system in Austria

In 1887 workers obtained the right to benefit in the case of disability resulting from an industrial accident, which continued to be paid also after the beneficiary reached the age presently described as the retirement age; in 1888 it was supplemented by health insurance[4]. In **1906** in the

2 Austrian shillings (ATS) were converted into the euro (EUR) at the exchange rate of ATS13.7603 per EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 12 February 2008.

3 https://www.cia.gov/library/publications/the-world-factbook/geos/au.html, accessed 31 March 2008.

4 These regulations came into force in 1889. *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 38.

territory of present-day Austria the first system of old age income security was introduced, which covered selected groups of white-collar workers[5]: over 18 and earning at least 600 crowns. The system started to function in 1909[6]. In 1914 the age for obtaining old age pension rights was set at 65 for women and 70 for men. In 1920 unemployment insurance was introduced[7]. In 1926 two amendments were introduced, one to extend the system to cover white-collar workers, and the other to give the possibility to retire 5 years ahead of the retirement age, i.e. at 60 for women and 65 for men[8]. After the annexation of Austria by Germany in 1938, German law was introduced and as of the beginning of the following year all workmen became insured, and the rights of white-collar workers were supplemented by the right to early retirement in the case of disability. Family benefits were instituted in 1948[9]. The next important year was 1956, when the social security act of 1955 (*Allgemeines Sozialversicherngsgesetz*, ASVG)[10] started to operate, giving coherence to rules that applied to white-collar workers and blue-collar workers[11]. In 1956 the old-age pension contribution paid by the hired labour force was 10%[12]. In 1958 blue-collar workers obtained the right to early retirement due to unemployment[13]. In 1961-1966 both white- and blue-collar workers became entitled to early retirement due to a sufficient period of employment. In 1972 a separate scheme for public notaries was set up (*Notarversicherungsgesetz*, NVG)[14]. In 1973 the right to early retirement was granted to those who were self-employed in industry, and in 1977 to

5 Kawiński M. (2004a), pp. 29 and further.
6 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 36.
7 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 40.
8 Schulze I., Schludi M. (2007), p. 566.
9 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 41.
10 http://ris1.bka.gv.at/bgbl-pdf/RequestDoc.aspx?path=bgblpdf/1955/19550050.pdf&docid=19550050.pdf, accessed 3 December 2007.
11 Schulze I., Schludi M. (2007), p. 567.
12 Felderer B., Koman R., Schuh U. (2006), p. 520.
13 Kawiński M. (2004a), p. 30.
14 http://ris1.bka.gv.at/bgbl-pdf/RequestDoc.aspx?path=bgblpdf/1972/19720023.pdf&docid=19720023.pdf, accessed 3 December 2007.

farmers. On the grounds of the regulations of 1978[15], in 1979 the self-employed (*Gewerbliches Sozialversicherungsgesetz*, GSVG)[16], farmers (*Bauern-Sozialversicherungsgesetz*, BSVG)[17] and people of registered professions (*Sozialversicherung freiberuflich selbständig Erwerbstätiger*, FSVG)[18] were granted a basic retirement income, as well as obtained the right to early retirement due to a sufficient employment period. In 1984 the retirement benefit calculation period was extended from 5 to 10 years[19]. In 1985 the system governing civil servants and that of other types of employees unified their pension calculations based on the best 18 years of paid employment[20]. In the year 1986 early retirement due to unemployment was expanded to cover the self-employed in industry, agriculture and the registered professions. In the late 1980s[21] it was possible to retire at 55 for women and at 60 for men. The standard pension was equal to 79.5% of the last remuneration and was paid after 45 contribution years. The contributions of employees equalled 22.70% of the gross remuneration, of which 10.25% was paid by the employer and 12.45% by the employee. In 1992 the decision was made that in the period from 2024 to 2033 the retirement age for women will gradually be increased to the 65th year of age, and that from 2019 to 2028 the early retirement age limit for women will be increased from 55 to 60[22]. In 1993 the rule to index pensions in accordance with the net instead of the gross remuneration was introduced[23], at the same time increasing the civil servants' contributions to 10.25% of their salaries[24]. The government

15 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 36.
16 http://ris1.bka.gv.at/bgbl-pdf/RequestDoc.aspx?path=bgblpdf/1978/19780191.pdf&docid=19780191.pdf, accessed 3 December 2007.
17 http://ris1.bka.gv.at/bgbl-pdf/RequestDoc.aspx?path=bgblpdf/1978/19780191.pdf&docid=19780191.pdf, accessed 3 December 2007.
18 http://ris1.bka.gv.at/bgbl-pdf/RequestDoc.aspx?path=bgblpdf/1978/19780214.pdf&docid=19780214.pdf, accessed 3 December 2007.
19 Schulze I., Schludi M. (2007), p. 571.
20 Schludi M., (2005), p. 166.
21 Schludi M., (2005), pp. 165 and further.
22 Schulze I., Schludi M. (2007), p. 571.
23 Schludi M., (2005), p. 167.
24 Schulze I., Schludi M. (2007), p. 571.

proposals for changes to the pension system were strongly opposed by public opinion, and this showed in the election held in 1994 with support for the FPÖ (the party run by Jörg Haider, the loudest critic of the proposed changes) at 22.5%[25]. Despite this, in 1995 the government managed to increase the minimal number of contribution years required for yearly retirement from 35 to 37.5 years[26] and to increase the contributions paid by civil servants from 10.25% to 11.75% of their salaries[27]. In June 1997 the next set of changes was decided upon: 1) to start increasing in 2012 the number of pension calculation years from 15 to 20, 2) to decrease the pensions for early pensioners by 2% for every year of early retirement, 3) to change the pension calculation base for civil servants from their last salary to the average salary for the last 15 years, and 4) to introduce a formula decreasing the state pensions by 2-3%[28]. In 1998 the retirement scheme covered practically all the employed[29]. In the 1990s another legal regulation was implemented which enabled company pension plans to operate on a completely voluntary basis[30]. In 2000 the expenditure on the public pension scheme reached 14.5% of the GDP, which was the highest figure among all OECD countries[31]. Only in 2000 did the new staunchly market-liberal government[32] notice the pension problem and set about changing it. In 2000 the retirement age rose by 1.5 years – to 56.5 for women and 61.5 for men; additionally, a decision was made to decrease the pension by 3% for each year of early retirement. Moreover, the civil servants' retirement age was increased by 1.5 years from 60 to 61.5 and the widow's pension payment principle was changed from 40-60% to 0-60% of the remuneration of the deceased

25 Schludi M. (2005), p. 169.
26 Schludi M. (2005), p. 171.
27 Schulze I., Schludi M. (2007), p. 571.
28 Schludi M. (2005), p. 175.
29 Kawiński M. (2004a), p. 30.
30 *Report on the Austrian Pension Strategy 2005* (2005), p. 11.
31 Holzmann R. (2006), p. 226.
32 In February 2000 Wolfgang Schüssel, the leader of the ÖVP, decided to form a governmental coalition with the FPÖ.

spouse[33]. On 1 July 2002, the Parliament accepted the government proposal to change the rules of the severance pay (*Betriebliches Mitarbe itervorsorgegesetz*) by allotting 1.5377% of the gross remuneration to the central fund (*Mitarbeitervorsorgekasse*, MVK), which marked the first step towards the pillar system in Austrian pensions[34]. On l January 2003, the Pension Security Institution (*Pensionsversischerungsanstalt*) was created through the merger of the Pension Insurance Institution for White-Collar Workers (*Pensionsversischerungsanstalt der Angestellten*) and the Pension Insurance Institution for Blue-Collar Workers (*Pension sversischerungsanstalt der Arbeiter*). More significant changes to pensions themselves took the form of legal acts and were enacted only in years 2003-2004. The most important reforms of 2003 were as follows: 1) total abandonment of early retirement from 2017, 2) the reduction from 2009 of the pension calculation rate of the contribution years from 2.00% to 1.78% of the calculation base for each contribution year[35], and 3) a gradual increase of the base period for pension calculation from 15 to 40 years in 2028[36], however, with a reduction for women of 3 years for every child to whom they have given birth[37]. Moreover, the penalty and reward for early or postponed retirement were increased from 3.0% to 4.2%[38] for each year. Before the reform of 2004, the contribution of the employee was 22.8% of the remuneration, of which 10.25% was paid by the employee and 12.55% by the employer. The miners' contribution was 28.30%, of which 18.05% was paid by the employer and 10.25% by the employee[39]. The contributions of farmers were 14.50%, those of registered professionals 20.00%, of civil servants 11.75%, and the contributions of the self-employed

33 Schludi M. (2005), p. 178.

34 This act came into force on 1 January 2003. More information in: Schludi M. (2005), p. 181.

35 The expected benefit, equal to 80% of the last remuneration, was to be reached after 45 contribution years, instead of the previously assumed 40 years. (In the old solution 80%/40 years = 2% per year, in the new one: 80%/45 years ≈ 1.78% per year.)

36 Felderer B., Koman R., Schuh U. (2006), p. 525.

37 Schludi M. (2005), p. 188.

38 *Report on the Austrian Pension Strategy 2005* (2005), p. 12.

39 Kawiński M. (2004a), p. 34.

were set at 15.00%[40]. The reform of 2004 (*Pensionsharmonisierungsgesetz*)[41], which came into force at the beginning of 2005, had the following key elements: 1) the introduction of the unified pension law (*Allgemeines Pensionsgesetz*, APG)[42] replacing differing regulations existing at that time in various branches of industry (ASVG, GSVG, BSVG, FSVG), and 2) the introduction of individual pension accounts for blue-collar workers, white-collar workers, the self-employed in non-agricultural sectors, farmers, and civil servants aged 49 and less. The last change resulted in the fact that all people whose first employment started after 1 January 2005 will accumulate their pension on individual accounts in the public system, and those who have already participated in the system, but on 1 January 2005 did not reach their 50th year of age will have their pensions calculated accordingly to both the old and new systems, in proportion to the length of their time in employment before and after that date. By these changes, the notionally defined contribution (NDC) was introduced into the public system. The other important elements of the 2004 reform were the introduction of: 1) the so-called pension corridor, in combination with the gradual renouncement of the option of early retirement, and 2) the new inflation-related formula for the indexation of pensions. The goal set by the reform of 2004 can be expressed by '80/65/45 formula'[43], meaning that a 65-year-old person becoming a pensioner will have a pension equal to 80% of their average payment for 45 contribution years. Another rule will be 'the same pensions for the same contributions'. For this reason the size of the standard contribution was unified at a level of 22.8%, although certain budgetary subsidy has been foreseen, which in the case of the self-employed is 5.3% (themselves paying 17.5%), and in the case of farmers 7.8%, with them paying the remaining 15.0%. The reform of 2004 also introduced the rule that the state pays the pension contribution for those taking care of their new-born child for a period

40 Felderer B., Koman R., Schuh U. (2006), p. 520, and Kawiński M. (2004a), p. 34.

41 http://ris1.bka.gv.at/authentic/findbgbl.aspx?name=entwurf&format=pdf&docid=COO_2026_100_2_129905, accessed 3 December 2007.

42 Schulze I., Schludi M. (2007), p. 573.

43 *Report on the Austrian Pension Strategy 2005* (2005), p. 12.

of four years[44]; the contribution is equal to €1,350 per month and is paid to an individual pension account[45]. In 2004 in order to introduce this solution the state budget covered around 26% of the total cost of the pension system[46]. In 2005 the merger of the Austrian State Railway Insurance Company (*Versischerungsanstalt der österreichischen Eisenbahnen*, VAÖE) and the Austrian Mining Insurance Company (*Versischerungsanstalt der österreichischen Bergbaues*, VADÖB) took place, which gave rise to the Railway and Mining Insurance Company (*Versicherungsanstalt für Eisenbahnen und Bergbau*, VAEB). In 2006 the insurance law for farmers was revised. The new regulation (*Hacklerregelung*) which came into force on 1 January 2007 concerns the retirement of those performing hard labour. It is now possible for men engaged in such work to retire at 60, providing that their contributions were paid for at least 45 years, and that out of the last 240 months of employment at least 120 were involved in hard physical labour[47]. In 2007 all people participating in the new pension system were to receive their pension account statements for the period from the beginning of their participation to the year 2005, and in 2008 statements for 2006.

### 2.1.3 The present state of the pension system in Austria

Presently, the pension system in Austria consists of three pillars: 1) the mandatory public system, 2) the obligatory and voluntary company pension plans, and 3) the fully voluntary individual pension schemes. The present state of the pension system in Austria is presented in **Scheme no. 1**.

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44 In the case of twins even for 5 years.

45 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 91.

46 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 36.

47 This change will apply to women from 2024, when their retirement age starts to grow. At the moment they can retire according to the present norms. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 36.

**Scheme no. 1**

**The present state of the pension system in Austria**

<table>
<tr><th colspan="6">1st pillar</th><th>2nd pillar</th><th>3rd pillar</th></tr>
<tr><td colspan="6">the mandatory public system</td><td rowspan="4">the obligatory and voluntary company pension plans</td><td rowspan="4">the fully voluntary individual pension schemes</td></tr>
<tr><td colspan="5">the traditional pay-as-you-go defined-benefit (DB) public scheme – the so-called ‘Status 2004’</td><td rowspan="2">the new scheme – notionally defined contribution (NDC)</td></tr>
<tr><td colspan="5">the General Association of Austrian Social Security Providers<br>*Hauptverbandes der österreichischen Sozialversicherungsträger*</td></tr>
<tr><td>the Pension Insurance Institution<br>*Pensionsversischerungsanstalt*</td><td>the Social Security Institution for Farmers<br>*Sozialversischerungsanstalt der Bauern*</td><td>the Social Security Institution for the Self-employed<br>*Sozialversicherungsanstalt der gewerblichen Wirtschaft*</td><td>the Insurance Institution for Mining and State Railway<br>*Versicherungsanstalt für Eisenbahnen und Bergbau*</td><td>the Insurance Institution for Austrian Public Notaries<br>*Versischerungsanstalt des österreichischen Notariates*</td><td>*Allgemeines Pensionsgesetz*, APG</td></tr>
</table>

Source: Own elaboration.

**The public system** (1st pillar) incorporates two solutions: 1) the traditional pay-as-you-go defined-benefit (DB) public scheme[48] – applied exclusively to those who on 1 January 2005 were at least 50, and,

[48] Whitehouse E. (2007), pp. 56 and further.

proportionally to the time of their professional activity to those who on 1 January 2005 had not reached that age, and 2) the new scheme – notionally defined contribution (NDC) – applicable exclusively to those who took up their first employment after 1 January 2005, and proportionally to the time of their professional activity to those who had worked before but on 1 January 2005 were younger than 50.

In **the traditional system –** the so-called 'Status 2004' – the pensions of miners, civil servants, public notaries, hired employees, farmers, and the self-employed, differ from each other and are all regulated in different ways[49]. In the case of employees, the contribution is equal to 22.8% of the remuneration, of which 10.25% is paid by the employee and 12.55% by the employer. The miners' contribution is 28.30%, of which 18.05% is paid by the employer and 10.25% by the employee[50]. The contributions of registered professionals are equal to 20.00%, of the civil servants – 11.75%[51], of farmers –15.00%, and of the self-employed 17.50%[52]. The contributions are calculated up to an annual income of €45,000[53], which is roughly equal to 175% of average pay. The conditions for obtaining a pension are: reaching the age of 65 (men) or 60 (women) and having been employed for at least 180 months during the last 30 years or for 300 months during one's whole lifetime. Women are entitled to early retirement at 58 and men at 63[54]. In the case of men performing heavy physical labour, early retirement is possible at the age of 60 if the contributions were paid for the last 45 years, providing that during the last 240 months in employment at least 120 months involved heavy physical labour. In this type of early retirement the payments are decreased by 1.8% per year (0.15% monthly). Early retirement is also available for

49 Felderer B., Koman R., Schuh U. (2006), pp. 519-549, and *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 36.

50 Kawiński M. (2004a), p. 34.

51 Felderer B., Koman R., Schuh U. (2006), p. 520 and Kawiński M. (2004a), p. 34.

52 *Reform: Harmonisation of the Austrian Pension System (Austria)* (2005), p. 4.

53 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 36.

54 The age when early retirement is first possible is being put forward every quarter by 1 month. As of 1 October 2017 it will completely disappear. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 36.

those who were employed for a sufficiently long time, that is to 60-64-year-old men whose contributions have been paid for 45 years and to 55-59-year-old women that have been insured for at least 40 years. The user of this option is penalized by a 4.2% decrease in their benefit for each year of early retirement, to a level of 15% in total. The basis for the calculation of the pension is the average remuneration of the best 20 years[55], and benefit increases by 1.82% for each year of insurance[56]. The system also rewards postponed retirement with a 4.2% bonus for each year in employment above the statutory retirement age, to a maximum of 91.76% of the reference base[57]. The system does not formally declare a minimum benefit[58], although in practice the lowest pensions due to the operation of compensation benefits[59] financed by the state are brought up to a level which is regarded as minimal. Pensioners do not pay most of the social insurance contribution, the exception being the health insurance contribution. There are no income tax reliefs for pensioners. The beneficiaries of the state pension scheme obtain their monthly payments 14 times a year, with the extra payments in April and September[60].

The responsibility for providing the national old-age insurance is shared by five institutions[61], whose activities are co-ordinated by the General Association of Austrian Social Security Providers (*Hauptverbandes der österreichischen Sozialversicherungsträger*)[62]. The institutions are as follows:

- the Pension Insurance Institution[63] – *Pensionsversischerungsanstalt*,

55 This period will be increased each year by 12 months until it reaches 40 months in 2028.
56 In 2006 this value was 1.88% for each month, and finally in 2009 it will be 1.78% for each contribution year.
57 Therefore there is no motivation to postpone retirement after 68.
58 Felderer B., Koman R., Schuh U. (2006), p. 520.
59 For example, in 2005 the minimum pension of a lone pensioner was €662.99, and that received by spouses – €1,030.23. In 2006 lone pensioners received at least €690. Cf.: *Report on the Austrian Pension Strategy 2005* (2005), p. 9, and *Synthesis Report on Adequate and Sustainable Pensions. Annex. Country Summaries* (2006), p. 91.
60 Kawiński M. (2004a), p. 42.
61 *Dobrze ubezpieczony. System zabezpieczenia społecznego w Austrii* (2006).
62 *Report on the Austrian Pension Strategy 2005* (2005), p. 22.
63 The institution administers about 85% of all pensions.

- the Social Security Institution for Farmers – *Sozialversischerungsanstalt der Bauern*,
- the Social Security Institution for the Self-employed – *Sozialversich erungsanstalt der gewerblichen Wirtschaft*,
- the Insurance Institution for Mining and State Railway – *Versicherungsanstalt für Eisenbahnen und Bergbau*,
- the Insurance Institution for Austrian Public Notaries – *Versischerungsanstalt des österreichischen Notariates*.

In **the new system**, which functions according to the APG rules, the contributions of all professional groups have all been brought to the same level of 22.8% of the gross remuneration. The payment calculation basis is going to be 45 contribution years and 1.78% for each year. At present there are no beneficiaries of this new system, as its oldest participants will reach the retirement age of 65 in 2020[64].

The system of **company pensions** (2nd pillar) consists of company pension plans[65], which are voluntary, and of mandatory retirement severance pays (*Betriebliches Mitarbeitervorsorgegesetz*), which to the amount of 1.53% of the gross remuneration are paid by the employer on a monthly basis to the central fund (*Mitarbeitervorsorgekasse*, MVK) investing in capital markets. At retirement the beneficiary has a choice between an immediately paid out lump sum or long-term pension benefit.

The system of **individual insurance** (3rd pillar) is based on the pension quotation of insurance companies. One also has an option to take part in a pension fund[66] investing in capital markets (at least 40% of the assets of such funds must be located in bond instruments).

64 Women still 5 years earlier. The equalization of the retirement age will take place only in the period from 2024 to 2033.

65 At the end of 2004 such plans had about 413,000 participants, which was approximately 13% of all employees and around €10 billion in accumulated capital in the so-called suprasegmental pension funds. Cf.: *Report on the Austrian Pension Strategy 2005* (2005), p. 11.

66 Kawiński M. (2004a), p. 35.

### 2.1.4 Challenges and planned changes in the pension system in Austria

The replacement rates, which are considered to be the most informative characteristic of the pension system, are currently in Austria at very high levels of 64% and 80% in relation to the gross and net remuneration, respectively[67]. It is thought that there is no risk of pensioners' poverty in Austria, especially as a system of compensation allowances is in operation. Demographic trends are, however, expected to be a problem as it is forecast that in 2050 the life expectancy of men will reach 82 years, women 87, and that a total of 35% of the population will exceed 60 years of age[68]. Let us recall the aforementioned information that in July 2007 the part of the population which was 65 and over was 17.5%[69]. The classic pyramid that characterised the age structure at the beginning of the 20th c. will change its shape in the mid-21st c. into something resembling a sarcophagus[70] – over 1/3 of the population will be over 60. The expected length of life of a person aged 65 will grow from 18.5 years in 2005 to 22.9 years in 2050[71]. As a consequence, the number of the retired will get close to half the number of the employed, despite the predicted rise in the percentage of people active on the labour market. In this situation, the introduction in 2007 of the measure stipulated in the reform of 2004, that 'every three years a panel of experts will scrutinise the pension system and advise on necessary changes,' was of great importance.

Subsidies to old-age pension system, weighing heavily on the federal budget[72], are expected to decline. The budgetary spending on provision of retirement income is expected to be reduced to 10.9% of the GDP in

67 *Synthesis Report on Adequate and Sustainable Pensions. Annex. Country Summaries* (2006), p. 91.
68 Felderer B., Koman R., Schuh U. (2006), pp. 521 and 522.
69 https://www.cia.gov/library/publications/the-world-factbook/geos/au.html, accessed 31 March 2008.
70 This grim comparison was made by Marek Góra. Cf.: Góra M. (2003), p. 48.
71 *Report on the Austrian Pension Strategy 2005* (2005), p. 19.
72 In this area Austria competes for the leadership in Europe with Poland and Italy.

2050[73], according to the authors of the recent reform. It corresponds with the resolution to cease planning budgets with deficits as soon as in 2008[74].

It is extremely likely that equalizing the retirement ages of men and women, which is planned for years 2024-2033[75], will induce a significant amount of dispute. Another problem in the area of social acceptance may result from the termination of early retirement in 2017: it seems highly possible that certain political factions will make opposition to these changes an element of their political agenda.

One more difficulty may result from the highly probable unification of institutions handling pension systems in Austria, especially in the scope of consolidation of data processing systems of all involved institutions.

### 2.1.5 Summary

It is rather safe to say that the pension system in Austria fulfils the expectations of its participants, as it provides them with funds sufficient to maintain a fairly high standard of living. Thus, there was hardly any interest in Austria in changing it for many years. Only in 2003-2004 did Austrians make a decision to modify the traditional Bismarck model. The main reason to do this was on the one hand the unfavourable demographic trends, and on the other the international comparisons that turned out unfavourable for the country. The reform of the public element of the system (the 1st pillar) was relatively strongly publicised even though it was limited to several parametric changes with a cosmetic structural innovation in the form of individualization of accounts of young persons. These changes in fact did not go beyond the changes that started to be implemented in Europe in the mid-1990s, first in Italy and later in Sweden and Poland. The so-called 2nd pillar, formally existent

73 *Report on the Austrian Pension Strategy 2005* (2005), p. 20.
74 *Report on the Austrian Pension Strategy 2005* (2005), p. 18.
75 In the case of women born after 1 July 1968, the retirement age will rise every 6 months by 6 months, until the age of 65. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 36.

in Austria, has a marginal importance in financing pensions, especially in the context of possible withdrawal of accrued capital directly after the loss of employment. The 3rd pillar has a significant development capacity in this relatively affluent society. Other countries will find in the Austrian system a number of solutions worthy of analysis and possible to apply to their own situations. A prominent one is the fact that the state finances the pension contributions of those who stay at home looking after small children. Also the intended levelling of the retirement age for men and women is worth a closer look, especially in the context of the increased life expectancy for women and their retirement status being made equal to that of men. Yet another interesting element in the Austrian way in providing retirement income is the flexibility of the retirement age, which – with the application of actuarial calculations – provides one with the choice of the moment of retirement, ultimately between 62 and 68.

## 2.2 BELGIUM

### 2.2.1 General information about the country

The Kingdom of Belgium[76] (French: *Royaume de Belgique*, Dutch: *Koninkrijk België*) is a constitutional, hereditary by primogeniture (succession to the throne by the first-born son) monarchy. It is located in the western part of Europe, on the North Sea, and consists of three autonomous regions: the Flemish Region and the Walloon Region (commonly called Wallonia), covering jointly ten provinces, and the Brussels-Capital Region; moreover, Belgium has a number of small enclaves on the territory of the Netherlands.

As regards the official language, Belgium is divided into three language communities: French, Dutch, and German (in the area of Eupen and Malmedy). The largest ethnic group were the Dutch-speaking Flemish (58% of the population), and the French-speaking Walloons (31% of the

[76] *Wielka Encyklopedia PWN* (2001), v. 3, pp. 376 and further.

population). As far as religion is concerned, the Catholics amount to 75%, and the Protestants to less than 25%, of the population.

According to the Constitution of 1831 (often updated and finally changed in 1993 in order to make Belgium a federal country), the King is the head of state and the Prime Minister is in charge of the government.

Belgium was one of the founding members of the European Economic Community and EURATOM in 1957. In 1999 Belgium joined the Economic and Monetary Union, and replaced the Belgian frank with the euro[77].

The current monetary unit is the euro.

The GDP *per capita* (PPP) in 2007 was estimated at US$36,500, and its growth rate was 2.7%. The public debt was equal to 86.1% of the GDP[78].

The national current account at the end of 2007 showed the surplus of US$11.04 billion. The rate of unemployment was 7.6%.

In July 2007 the official record stated that 10,392,226 people[79] lived in Belgium, and the age groups were as follows: 0-14 years old – 16.5%, 15-64 years old – 66.1%, 65 years old and older – 17.4%. The life expectancy at birth was 78.92 years, for men – 75.75 years, and for women – 82.24 years.

### 2.2.2 The historic development of the pension system in Belgium

The history of the Belgian pension system goes back to the 19th c.[80]. In 1844 the first social security arrangements for civil servants were

[77] Belgian franks (BEF) were converted into the euro (EUR) at the exchange rate of EUR1 = BEF40,3399. Cf.: http://www.ecb.int/bc/intro/html/index.en.html, accessed 31 march 2008.

[78] The public debt to the GDP ratio has shown a falling tendency over a number of years in Belgium – from 136.7% of the GDP in 1993, 109.0% of the GDP in 2000, and 95.8% of the GDP in 2004. Cf.: *Strategy Report on Pension; Belgium 2005* (2005), p. 34.

[79] https://www.cia.gov/library/publications/the-world-factbook/geos/be.html, accessed 31 March 2008.

[80] Orenstein M. A. (2003), p. 179.

introduced[81], and in 1850[82] a legal Act was passed which granted the right to make pension arrangements with the Public Retirement Saving Society (*Caisse générale de retraite*) for anyone who could afford it[83]. In 1891 the Chamber of Laws created a pension fund and empowered the government with its management, at the same time earmarking for this purpose the capital which so far had been used for subsidizing the voluntary pension system. In 1894 the first legal Act was passed in Belgium concerning sickness and maternity insurance[84]. On 10 May **1900**, the first Belgian systemic pension solution was introduced[85], which in its initial phase covered only seamen[86]. In 1903 the first legal regulations were introduced on industrial accidents[87]. On 5 June 1911, the pension insurance was extended to cover miners[88]. In 1920 the first legal regulation to deal with the unemployment was passed[89]. On 10 December 1924, blue-collar workers were included in the pension system, and on 10 March 1925, civil servants[90]. Apart from the governmental money, the funds of the General and Retirement Savings Society (*Caisse générale d'épargne et de retraite*), which governed the payment of pensions, came from pension contributions paid in equal shares by the employer and the employee[91]. The saving society invested in various instruments on financial markets. Pension benefits were granted to any member of the society on turning 65, and – in the case of the death of the insured – to the spouse. In 1927 the law on occupational diseases was introduced[92], and in 1930, on family

81 Dellis A., Desmet R., Jousten A., Perelman S. (2004), p. 47.
82 Rubel K. (2004a), p. 55.
83 http://www.rvponp.fgov.be/onprvp2004/FR/H/H_a/H_a_01.asp, accessed 5 December 2007.
84 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 50.
85 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 49.
86 Rubel K. (2004a), p. 55.
87 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 51.
88 Rubel K. (2004a), p. 55.
89 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 53.
90 Anderson K. M., Kuipers S., Schulze I., van den Nouland W. (2007), p. 313.
91 Rubel K. (2004a), p. 55.
92 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 51.

benefits[93]. Until 1937, social insurance for the self-employed was not mandatory[94]. In 1945 the system started to gradually change from the capital formula to the pay-as-you-go formula; in the beginning, individual capitalization was retained and the pensions were supplemented with repartition and state subsidy supplements. By 1953 the transition towards the pay-as-you-go had been complete[95]. The law of 1955 concerned with blue-collar workers, and another in 1957 that dealt with white-collar workers, entitled these groups to a pension related to the number of years of employment and the average salary corrected on account of inflation. In 1956, the pension system was extended to cover the self-employed[96]. A number of institutions governed the pension system: the National Office for Pensions of Employees, (*Office national des pensions pour travailleurs salariés*), the National Retirement and Family Pension Saving Society (*Caisse national des pensions de retraite et de survie*), the National Insurance Institution for the Self-employed (*Institut national d'assurances sociales pour travailleurs indépendependants*), and the National Office for Social Insurance Safety for Local Administration (*Office national de sécurite sociale des administrations provincales et locales*). The regulations for white-collar and blue-collar workers were made uniform in 1967[97]. As a result of the 1982 regulations on early retirement, women lost the option of early retirement at 55 and all employees were granted the choice of a bridge pension at 60, at the cost however of 5% of the benefit for each year missing to the age of 65[98]. The parametric reform of 1984 dealt with the introduction of the same retirement age of 65 for both sexes – in the case of the public sector in 1996, and in the case of employees of private companies and the self-employed – progressively until 2009[99]. The required number of contribution years was set at 45, though in the case

93 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 54.
94 Anderson K. M., Kuipers S., Schulze I., van den Nouland W. (2007), p. 313.
95 Rubel K. (2004a), p. 56.
96 Dellis A., Desmet R., Jousten A., Perelman S. (2004), p. 48.
97 Anderson K. M., Kuipers S., Schulze I., van den Nouland W. (2007), p. 314.
98 Anderson K. M., Kuipers S., Schulze I., van den Nouland W. (2007), p. 318.
99 Since 2006 the age has been 64 years.

of women the extension was gradual[100]. Moreover, in 1984 the pension of the self-employed was made related to the size of their contributions[101]. On 1 April 1987, following the merger of the National Pension Office for Employees and the National Retirement and Family Pension Saving Society, the National Pension Office (*Rijksdienst voor Pensioenen*, RVP or *Office national des Pensions*, L'ONP)[102] was created. In 1990 a flexible retirement age was introduced for both sexes at the level of 60 years of age, and the bridge pension and early retirement arrangement were withdrawn[103]. In 1992 the rule was introduced that stated that the pension would diminish by 5% for each year of early retirement[104]. On 1 January 1995, the retirement contribution for employees of private companies was set at 37.94% of the gross remuneration[105]. In 1996 the pension age for both men and women employed in the public sector was set at 65, though in the case of women the shift was planned as an ongoing process going on until 2009. In 1999 the Pension Mediation Service (*Service de médiation pensions*)[106] was set up, an institution specific to Belgium. On 1 June 2001, a system of guaranteed income for the elderly was introduced. Also in 2001, a public institution called the old age fund or the silver fund was created; it invests in government bonds in order to provide financing for the extraordinary pension-related expenses predicted for 2010-2030[107]. In 2002 the expenditure on the pension system was equal to 11.2% of the GDP[108]. On 1 April 2003, a regulation was introduced that set up a minimal pension benefit in the case of the so-called mixed career, involving

100 Since 2006 the participation period for women has been 44 years.
101 Dellis A., Desmet R., Jousten A., Perelman S. (2004), p. 48.
102 http://www.rvponp.fgov.be/onprvp2004/DE/P/P_01.asp, accessed 5 December 2007.
103 Anderson K. M., Kuipers S., Schulze I., van den Nouland W. (2007), p. 319.
104 Dellis A., Desmet R., Jousten A., Perelman S. (2004), p. 44.
105 Anderson K. M., Kuipers S., Schulze I., van den Nouland W. (2007), p. 315.
106 In 2004 this agency analysed 1,770 complaints, 64% of which were evaluated as legitimate and requiring action to be taken. Cf.: *Strategy Report on Pension; Belgium 2005* (2005), p. 47.
107 *Strategy Report on Pension; Belgium 2005* (2005), p. 40.
108 *Strategy Report on Pension; Belgium 2005* (2005), p. 6.

the paying of contributions under various schemes[109]. In the middle of 2005, the pension benefit entitlement was granted to the spouses of the self-employed. On 16 December 2005, the Inter-Generational Contract of Solidarity (*Contrat de Solidarité entre des Générations*) was signed, which highlighted such issues as early retirement, the situation of people in employment past the pension age, and part-time employment[110]. The intention of the contract was to discourage people from early retirement and even to motivate them to continue employment past the retirement age. Most points of the contract came into force at the beginning of 2008. One of them stipulates that all the unemployed who are 45 or older should attend an at least six-month-long training on job-seeking and vocational skills, and the participation in such a course will be a necessary requirement for obtaining an early pension entitlement. Moreover, in the years from 2008 to 2012, the early retirement age qualification will gradually rise from 58 to 60. At the same time, the minimum number of contribution years for early retirement will rise from 25 to 35. From 1 January 2006, those who are between 62 and 65 years of age and continue their employment, receive certain tax privileges if they invest in private pension schemes.

### 2.2.3 The present state of the pension system in Belgium

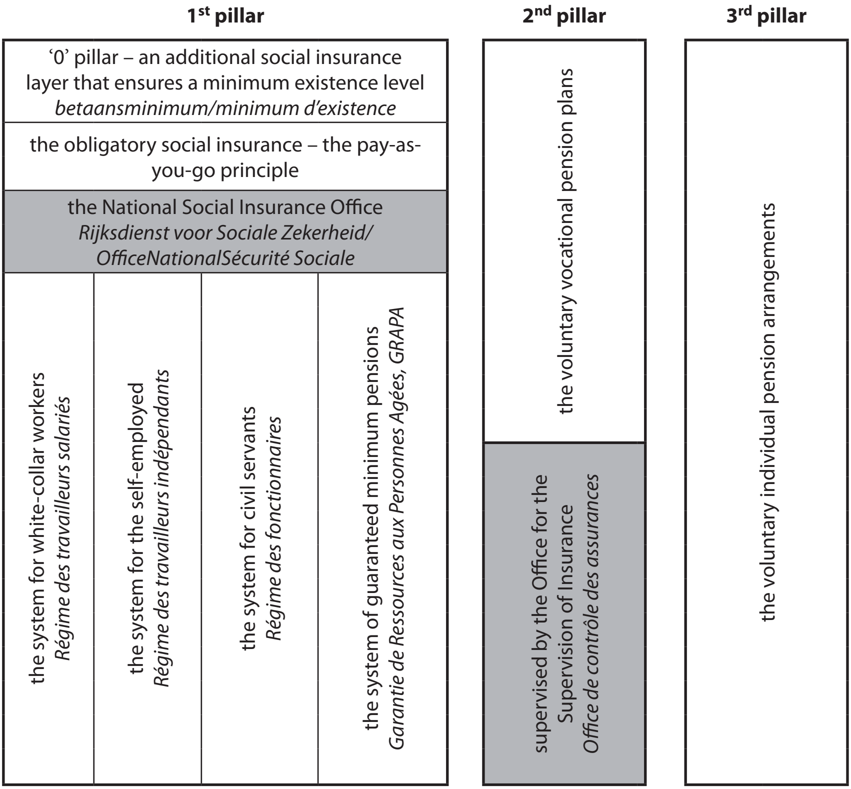
The Belgium pension system consists of three pillars: 1) obligatory social insurance governed by the state, 2) voluntary vocational pension plans, and 3) voluntary individual pension arrangements. The present state of the pension system in Belgium is presented in **Scheme no. 2**.

[109] *Strategy Report on Pension; Belgium 2005* (2005), p. 9.

[110] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 9.

**Scheme no. 2**

**The present state of the pension system in Belgium**




Source: Own elaboration.

**Obligatory social insurance**, called the 1st pillar, functions fully along the pay-as-you-go principle. It is built of four components – three large sector social insurance schemes: 1) for white-collar workers, 2) for the self-employed, 3) for civil servants, and 4) the sector that provides the guaranteed minimum pension. Next to this, there are separate sub-systems for miners and the uniformed services. There is no tax relief for the retired[111]. All these components include an additional social insurance layer that ensures a minimum existence level (*betaansminimum/minimum d'existence*)[112]. The 1st pillar receives a state subsidy equal to 21% of the revenue from VAT[113].

In **the system for white-collar workers** (*Régime des travailleurs salariés*), a man can retire at 65 providing he has been in the system for 45 years, and a woman can retire at 64 if she has 44 contribution years in the system. The pension contribution is equal to 37.84% of the gross remuneration, of which 24.77% is paid by the employer and 13.07% by the employee[114]. The pensions of miners and seamen are subject to different regulations[115]. The contributions are transferred to the National Social Insurance Office (*Rijksdienst voor Sociale Zekerheid/ Office National Sécurité Sociale*), and the whole system is governed by the National Retirement Income Office (RVP/L'ONP)[116]. The level of pension depends on three elements[117]: the individual employment history, the remuneration, and the family situation. Early retirement in 2008 is available to those who are at least 60 years of age and have worked for a minimum of 35 years. However, those taking this opportunity have their pension benefits reduced by 5% for each year of early retirement. The level of the benefit is also related to the number of contribution years and to the indexed average pay of the person. In the case of a lone person, the replacement rate is 60%[118], and in the case of spouses – 75%[119] of the earnings of the head of the family[120]. The benefits are indexed against the consumer price index (CPI). The system provides for a minimum

111 Whitehouse E. (2007), p. 60.
112 Anderson K. M., Kuipers S., Schulze I., van den Nouland W. (2007), p. 316.
113 *The Handbook of Western European Pension Politics* (2007), p. 874.
114 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 49.
115 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 49.
116 *The Handbook of Western European Pension Politics* (2007), p. 874.
117 *Strategy Report on Pension; Belgium 2005* (2005), p. 4.
118 Whitehouse E. (2007), p. 59.
119 To be more specific, the following formula is used: benefit = `n/45´ x `gross remuneration´ x `k´, where n – number of contribution years, k – replacement rate.
120 *The Handbook of Western European Pension Politics* (2007), p. 875.

pension, which is equal to 56% of the average net pay[121], and a maximum pension equal to 120% of the gross average pay. Since 1 December 2007, the minimum retirement benefit of a lone person has been €1,060.67 per month[122].

**The system for the self-employed** (*Régime des travailleurs indépendants*) provides that the pension age for men is 65, with participation in the system set at 45 years. The pension age for women is 64, with a 44 year participation scheme. Early retirement is possible from the age of 60, though a 5% reduction is applicable for each year of advanced retirement. In this system, the contribution consists of two elements: 1) the part which is paid by the participant and is related to their income – 16.7% of one's income within the first threshold[123] and 12.27% on the income above this level to the limits of the second threshold[124], and 2) a subsidy from the federal government at a level of 37% of the total benefit[125]. Pension benefits are not related to the value of paid-in contributions (flat-rate pension), but depend on the marital status of the retired person and are equal to 100% of the minimum pension for a person who is a family provider and 80% for those who live alone[126].

**The system for civil servants** (*Régime des fonctionnaires*) provides for the same retirement age for both sexes: 65 years. However, in the case of certain professions, e.g. teachers or army personnel, it is possible to retire early, at 58 or even 55, without any decrease in the benefit. The level of the pension equals 75% of the average pay of a given person. The system provides for a minimum pension, which is 56% of the average pay in the case of a person who lives alone and 70% of the lowest pay for married couples. There is also a top limitation on the amount of benefit,

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[121] In 2005 it was €10,191.95 per year for a lone person, and €12,739.94 per year for a couple. Cf: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 49.

[122] http://www.rvponp.fgov.be/onprvp2004/DE/B/B_c/B_c_20071128.asp, accessed 5 December 2007.

[123] In 2005 it was €46,035.

[124] This one in 2005 was equal to €67,352. There was no contribution on incomes exceeding this level.

[125] Dellis A., Desmet R., Jousten A., Perelman S. (2004), pp. 48 and 49.

[126] *The Handbook of Western European Pension Politics* (2007), p. 875.

as it cannot exceed three times the value of the average gross pay in the private sector. The retirement income of civil servants is related to the average remuneration.

**The system of guaranteed minimum pensions** (*Garantie de Ressources aux Personnes Agées*, GRAPA) is financed by governmental funds and is applicable exclusively to those who have reached their retirement age[127]. To qualify for this program, a person must belong to the white-collar workers pension scheme or be self-employed, and must have paid their pension contributions for over at least 2/3 of their employment time, i.e. a minimum of 30 years, in the same system. In the case of civil servants, the entitlement to the minimum benefit is granted to those with at least 20 years of service[128].

**The voluntary vocational pension plans**, which create the 2nd pillar of the Belgian pension system, are set up by individual employers or groups thereof. The contributions that these employers pay under such arrangements reduce their obligations towards the public system. Vocational pension plans are supervised by the Office for the Supervision of Insurance (*Office de contrôle des assurances*). The discussed plans are used by around 25% of the employees of the private sector[129].

**Individual pension insurance** (3rd pillar) is realized by saving for pensions with banks[130], pension insurance in life insurance institutions, or long-term investments in investments funds. All these forms of saving for pension are rewarded by tax allowances. They are used by around 45% of the vocationally active.

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127 The minimum benefit for a self-employed person and a person with a mixed-type career in 2005 was €8,200 per year, and for an employee €10,396 per year. Cf.: *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 7.

128 *Strategy Report on Pension; Belgium 2005* (2005), p. 9.

129 Data collected at the end of 2004. Cf.: *Strategy Report on Pension; Belgium 2005* (2005), p. 22.

130 In 2005, the maximum value of the capital located yearly on these accounts was €620. Cf.: *Strategy Report on Pension; Belgium 2005* (2005), p. 16.

### 2.2.4 Challenges and planned changes in the pension system in Belgium

The adaptation of their pension system to unfavourable demographic changes is the most important challenge for the Belgian old-age income provision authorities. Żukowski[131] states that at the end of 2003, as many as 21.8% of the citizens of Belgium were at least 60 years old. Also the number of very old pensioners has its impact on the Belgian pension system, as in the same year as many as 7.7% of the population were 75 years old or older[132]. It is estimated that in 2050 the dependency factor will reach 47%[133]. Yet another element that can play a role in changing the organization of the Belgian pension system is the mobility of employees, who often migrate from the public to the private sector, or become self-employed[134]. Moreover, incoherence in the formulas of various elements of the pension system is a problem that will require effective action. The high level of public debt[135] is another challenge that stands before Belgium, especially in the area of sponsoring pensions with public money. There are plans to reduce this debt to the level of 60% of the GDP in the year 2015[136]. This will surely make its mark on financing the pension system from the state budget. The expenditure on the pension system in the year 2050 is expected to be 15.5% of the GDP[137]. It is also thought that the legal framework of the 2nd pillar is insufficient and slows down

131 Żukowski M. (2006), p. 18.

132 In the European Union, in 2003 only in Sweden was that proportion higher than in Belgium. Cf.: *Strategy Report on Pension; Belgium 2005* (2005), p. 5.

133 The dependency ratio is the ratio of those aged 65 or more to those aged 15-64. Cf.: *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 9.

134 Dellis A., Desmet R., Jousten A., Perelman S. (2004), pp. 41 and 42.

135 As quoted earlier, it was over 90% of the GDP at the end of 2006. It is one of the Maastricht convergence criteria for the Eurozone countries that this figure should not exceed 60% of the GDP.

136 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 8.

137 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 8.

the economy of the country[138]. It is expected that some effort to improve this sector will be made, although, so far this has not been the case.

### 2.2.5 Summary

The Belgian pension system is based on the traditional pay-as-you-go model. Despite significant threats to the system's future stability, no activities aimed at the individualization of the 1st pillar have so far been observed. Belgians still put a lot of stress on inter-generational solidarity, which is basically expressed by solutions found in Bismarck's pension model. The 2nd and 3rd pillars, totally voluntary, play a rather marginal role in Belgium. Therefore, the pension system finds little extension in capital markets. In the opinion of the author, the only interesting feature of Belgium old-age income provision is the existence of the Pension Mediation Institution. This may be of interest to other countries.

## 2.3 BULGARIA

### 2.3.1 General information about the country

The Republic of Bulgaria[139] (*Република България*) lies in the south-eastern part of Europe, on the Balkan Peninsula on the Black Sea, and consists of 28 districts and 262 municipalities.

The official language is Bulgarian. The largest ethnic group in the country were Bulgarians, who constituted 83.9% of the population; the most important minorities were the Turks – 9.4%, and the Gypsies – 4.7%. The members of the Bulgarian Orthodox Church constituted 82.6% of the population, and Muslims 12.2%.

According to the Constitution of 1991, the head of the state is the President, and the government is in the charge of the Prime Minister.

138 Cf.: *Regulation holding back Belgium's second pillar growth* (2006).

139 *Wielka Encyklopedia PWN* (2001), v. 5, pp. 23 and further.

In 2004 Bulgaria joined NATO[140] and in 2007 accessed the European Union.

The monetary unit is the lev (BGN[141], *лев*).

The GDP *per capita* (PPP) in 2007 was estimated at US$11,800 and showed a growth rate of 6.1%, the public debt was equal to 18.2% of the GDP, and the current account balance at the end of 2007 showed the deficit of US$7.189 billion.

The unemployment rate was 8.0%.

In July 2007 the officially recorded population of Bulgaria was 7,322,858 people[142], the age structure being as follows: 0-14 years old – 13.9%, 15-64 years old – 68.7%, 65 years old and older – 17.4%. The life expectancy at birth was 72.57 years, with men reaching on average an age of 68.95 years, and women 76.40.

### 2.3.2 Historic development of the pension system in Bulgaria

The beginning of the Bulgarian pension system dates back to 1891, when the first old age income system covered civil servants[143]. The first sickness insurance scheme was created in 1918[144]. In **1924** the first comprehensive regulation of old-age retirement income extended the system to cover the employees of the private sector[145]. Also in 1924 the

140 *North Atlantic Treaty Organisation* (NATO).

141 The present currency of Bulgaria is sometimes called the fourth lev. On 5 July 1999, the previous lev, marked by ISO 4217 standard as BLG, was denominated with a 1000:1 rate to the new lev, which at that time was equal in value to the German mark and marked by the code BGN (BGN1 = DEM1). On 31 December 2007, EUR1 was worth BGN1.9558. Cf.: http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-bgn.en.html, accessed 31 March 2008.

142 https://www.cia.gov/library/publications/the-world-factbook/geos/bu.html, accessed 31 March 2008.

143 Żukowski M. (2006**),** p. 109.

144 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 58.

145 Żukowski M. (2006), p. 109.

first Accident Insurance Law was passed[146]. One year later, in 1925, the first regulation[147] dealing with unemployment was published. At the beginning of the 1940s, separate pension systems were introduced for various professions[148], and in 1942 the law regulating family allowances came into force[149]. The obligation to pay pension contributions was abolished in 1948, and during the period 1949-1951 separate old-age income solutions were integrated into one system and nationalized[150]. The Pension Act of 1957 divided the employed into three categories, giving each of them a different status: – category I covered people performing jobs considered hazardous, category II covered those performing jobs with a health hazard, and category III included all the remaining people. Old-age income security was provided for family members of those working for farming cooperatives[151] in 1975. In 1985 an indexation formula was introduced. In 1994 the authorities created the possibility of collecting capital for old age on a voluntary basis with the help of pension funds[152]. In the mid-1990s, the retirement contributions for the employees classified in the category I of employment consumed the larger part of their remuneration[153]. In 1996 the National Social Security Institution (*Национален осигурителен институт*) was set up, and in 1998 a new health security law was enacted[154]. In July 1999 an act concerned with voluntary supplementary pension funds was enacted. In 1999 the retirement age for men was 60, and for women 55. Since 1 January 2000 the retirement age has increased by 6 months at the beginning of each

146 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 59.
147 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 59.
148 Żukowski M. (2006), p. 109.
149 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 60.
150 Żukowski M. (2006), p. 110.
151 Żukowski M. (2006), p. 110.
152 Noncheva T., Satcheva D. (2003), p. 48. The first pension societies were created on 9 May 1994: *Пенсионно осигурителна компания Доверие АД and Пенсионноосигурителна компания Съгласие АД. Cf.:* http://assoc.pension.bg/en/display.php?page=member_as, accessed 27 February 2007.
153 Żukowski M. (2006), p. 110.
154 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 58.

year, with the intention of bringing the retirement age in 2009 to 63 for men and 60 for women[155]. In March 2000, the National Taxation Agency (*Национална агенция за приходите*) was created, whose responsibilities included the collection of social insurance contributions[156]. In September 2000, voluntary pension funds were obliged to obtain a formal state licence[157]. The Compulsory Social Insurance Code of 2000 introduced a three-pillar model for old-age retirement income, effective as from 2002: 1) the general compulsory pay-as-you-go system, 2) obligatory social insurance, working together with funds operating on capital markets, comprising two categories – a) an occupational system for those working in particularly difficult conditions, b) a universal system for all employees born after 31 December 1959, and 3) a complementary pension system operating on a voluntary basis[158]. In 2000 the cost to the state of the pension system amounted to over 9.6% of the GDP[159]. In 2001 there were 2.37 million retired people in Bulgaria[160]; their retirement benefits varied between BGN42 and BGN168, while the average employee's remuneration equalled BGN263[161]. In 2001 the pension contribution in the 1st pillar was 32.7%, of which 26.3% was paid by the employer and 6.4% by the employee[162]. On 1 January 2002, the reformed system was put into operation, including its compulsory capital element. The new element applied to all employees under 42 years of age, and the new contribution was 2% of the gross pay and was paid jointly by the employer and the employee in the proportion 65% : 35%, respectively[163].

155 Noncheva T., Satcheva D. (2003), p. 50.
156 http://www.minfin.government.bg/inpage.php?id=187&language=english, accessed 26 February 2007.
157 Żukowski M. (2006), p. 113.
158 Noncheva T., Satcheva D. (2003), p. 45.
159 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 3 and Noncheva T., Satcheva D. (2003), p. 70.
160 Noncheva T., Satcheva D. (2003), p. 49.
161 Noncheva T., Satcheva D. (2003), p. 70.
162 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 23.
163 Müller K. (2003b), p. 50.

The system provided for the possibility of the contribution to grow to 5%[164]. Under the 2002 reform, the teachers' pensions were incorporated into the general system, leaving the opportunity of early retirement only open to those working in difficult conditions. In 2003 the Commission for the Supervision of Finance (*Комисия за финансов надзор*) was set up, which – having integrated the system of supervision over the financial institutions other than banks – started to supervise open pension funds. On 1 June 2005, the minimum social pension was set at BGN60[165]. At the beginning of 2006, the social security contribution was reduced from 29% to 23%[166], of which 19% was allocated to the 1st pillar and 4% to the 2nd pillar[167]. On 1 July 2006, the minimum social pension rose to BGN85[168]. The Bugetary Act for 2006 introduced the so-called silver fund[169] that – with a start-up capital of BGN500 million – began to operate on 20 July 2006 with the intention of financing the 1st pillar of the pension system in the future[170]. In 2007 the fund was supposed to be financed by 50% of the revenues from the privatization of state property and 10% of the budgetary surplus. In the beginning of 2007, a regulation was imposed that the pension contributions for both the 1st and the 2nd pillars were to be paid in equal shares by the employee and the employer. Also in 2007, the non-obligatory employer-sponsored retirement funds started to operate (the 3rd pillar), in accordance with the IORP[171] European Directive.

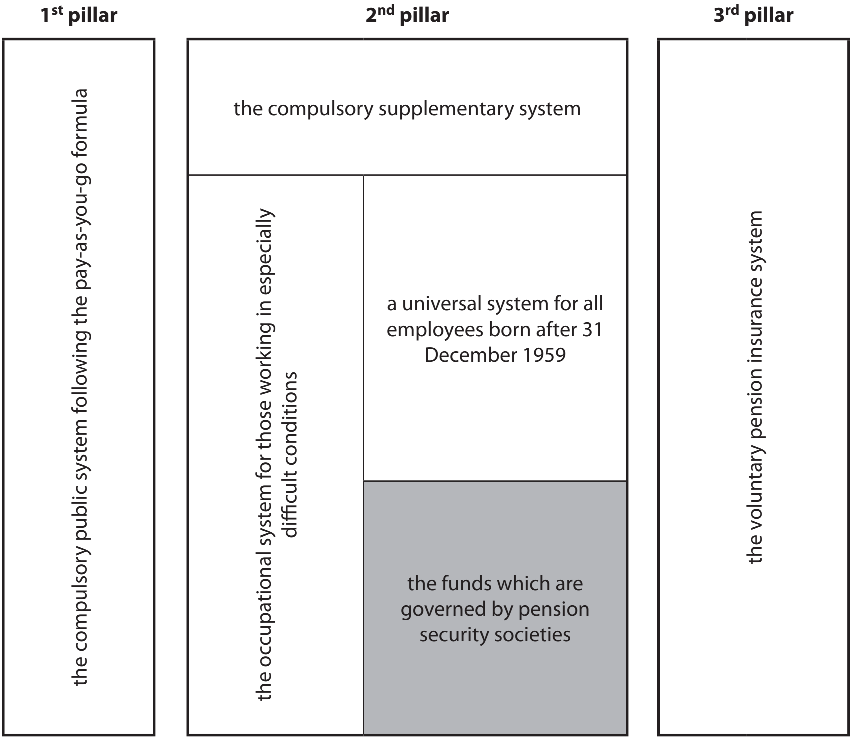
164 Holzmann R., Hinz R. et al. (2005), p. 154.
165 http://www.noi.bg/en/index.html, accessed 25 February 2007.
166 http://www.sofiaecho.com/article/social-security-contributions-in-bulgaria/id_18355/catid_23/search_1, article of 30 October 2006, accessed 26 February 2007.
167 Cf.: Petkov B. (2006).
168 http://www.sofiaecho.com/article/bulgarias-government-shines-silver-fund/id_16758/catid_23, article of 31 July 2006, accessed 26 July 2007.
169 A similar solution was applied before, in 2001, in Belgium.
170 http://www.sofiaecho.com/article/bulgarias-government-shines-silver-fund/id_16758/catid_23, article of 31 July 2006, accessed 26 February 2007.
171 Directive 2003/41/EC of the European Parliament and of the Council of 3 June 2003 *on the activities and supervision of institutions for occupational retirement provision OJ L 235, 23.9.2003, p. 10–21*. The two-year period for Member States to implement this directive expired on 23 September 2005.

### 2.3.3 The present state of the pension system in Bulgaria

Currently the Bulgarian pension system consists of three pillars: 1) the compulsory public system functioning along the pay-as-you-go formula (1st pillar), 2) the compulsory supplementary system, constituting the 2nd pillar, and 3) the voluntary pension insurance system (3rd pillar). Next to these, there is a separate retirement income solution for farmers and growers of tobacco. The present state of the pension system in Bulgaria is presented in **Scheme no. 3**.

**Scheme no. 3**

**The present state of the pension system in Bulgaria**




Source: Own elaboration.

Within **the compulsory pension system**, the retirement age is 63 for men and 59.5 for women[172]. The qualification for a pension is expressed as the sum of the age of the person and their number of contribution years, and is set at 100 for men[173] and 94 for women. The size of the pension benefit depends on three elements: 1) the so-called average insurance income, 2) the factor reflecting the ratio of the remuneration to the average insurance income, and 3) the number of contribution years. Each year of participation in the system means 1% of the pension[174]. The individual coefficient is calculated on the basis of the personal income for all the years in the insurance scheme from 1 January 1997 until retirement. As for the period before 1 January 1997, the insured person him- or herself selects three consecutive years out of 15 years in the system[175]. An elderly person who does not have a sufficient contribution history may still obtain a social pension at the age of 70[176]. The total contribution amounts to 23% of the gross remuneration, but stops rising on reaching a certain limit[177]. The contribution is paid by the employer and the employee in equal parts. Of the total value of the contribution, 19% remains in the repartition system, and 4% is transferred to open pension funds[178]. The contribution is calculated only on the part of income that ranges between BGN180 and 1,400. On top of that, the employer is obliged to pay an additional 3% for the employees of the category I and II. Those in self employment pay 23% of the declared income up to BGN1,400, of which 19% goes to the 1st pillar and 4% to the 2nd one. The system provides for a minimum pension, which is 115% of the social pension[179]. Except for special groups of workers, there is no

[172] The process of increasing the retirement age started in 2000; it was set in the case of men in 2005 at 63 years. In the case of women, the value will grow at the rate of 0.5 year annually and stop in 2009 at 60.

[173] Noncheva T., Satcheva D. (2003), p. 69.

[174] Whitehouse E. (2007), p. 127.

[175] Noncheva T., Satcheva D. (2003), pp. 50-51.

[176] As mentioned before, since 2006 this pension benefit has been set at BGN85.

[177] In 2006 this limit was BGN1,400. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 56.

[178] Żukowski M. (2006), p. 113.

[179] Whitehouse E. (2007), p. 127.

possibility of early retirement, but it is possible to postpone retirement for as long as one wishes to[180].

Within the framework of **the obligatory supplementary system** (2$^{nd}$ pillar) there are two types of solution 1) a system designed especially for those working in especially difficult conditions, and 2) a universal system for all employees born after 31 December 1959.

**The occupational system for those working in especially difficult conditions** classifies its members into two categories. The contribution is in both cases paid by the employer, and amounts to 12% in category I and 7% in category II. This is the only system where the employee may chose early retirement.

**The universal system for all employees** requires that a contribution equal to 4% of the gross remuneration is paid jointly by the employee and the employer in even parts. The contributions are recorded on individual accounts in open pension funds[181] and invested in capital markets. The funds are governed by pension security societies, which are affiliated to the Bulgarian Association of Supplementary Pension Societies of (*Българската асоциация на дружествата за допълнително пенсионно осигуряване*, БАДДПО).

The system of **voluntary pension insurance** consists of voluntary pension funds[182]. Since the beginning of 2007, there have been employer-sponsored funds on the market working in accordance with the IORP European Directive.

### 2.3.4 Challenges and planned changes in the pension system in Bulgaria

The main problem of the Bulgarian pension system seems to be the low value of the pension benefits on offer. The fact that during the period

[180] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 56.

[181] At the end of June 2006, on the market there were 24 pension funds, under the governance of 8 pension insurance societies. Cf.: Abadjiev N. (2006). On 17 August 2006, a licence was granted to the ninth one – a pension insurance society named *Пенсионноосигурително дружество 'Топлина'* (*АД*).

[182] In 2002 these funds had 0.5 million members.

of the steered economy the pensioners were treated as second rate citizens resulted in the majority of the retired having to live on very small incomes of between BGN85 to 100 per month[183]. The only chance for a change is significant economic growth of the country. The country's present openness to international cooperation, and other changes as, for example, the decrease in 2007 of the corporate income tax from 15% do 10%[184], certainly boosts Bulgaria's economy. One particular problem for Bulgaria is that until recently only less than 1/10 of those employed in agriculture were entitled to any retirement income[185]. The process of a gradual increase in the retirement age, which is due to finish in 2009, does not create any serious difficulties now and is not likely to create them in future, as it is generally approved by all political forces. On the other hand, the deficit in the social system of 2007-2009 may in its course turn out to be a major setback; its causes lie mostly in the demographic situation of the country and the fall in numbers of those who pay social insurance contributions. The insufficient number of contribution payers results from unemployment[186] and the emigration of those with Turkish nationality[187]. The difficulty seems to be compounded by the scope of the parallel economy in Bulgaria, and, consequently, the number of insurance contributions that fail to be paid[188]. Yet another matter is the efficiency of the pension institutions and the collection of declared pensions, although some improvement can be observed after the reduction of the social insurance contribution[189].

183 http://www.sofiaecho.com/article/tussle-over-bulgarias-pensions/id_20622/catid_5/search_1, article of 19 February 2007, accessed 26 February 2007.

184 http://www.sofiaecho.com/article/social-security-contributions-in-bulgaria/id_18355/catid_23/search_1, article of 30 October 2006, accessed 26 February 2007.

185 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 23.

186 Some symptoms of improvement are already present. The data published in 2007 show a more than 9% decrease in the unemployment rate. Cf.: http://www.neurope.eu/view_news.php?id=70002, accessed 26 July 2007.

187 In 1988, before the emigration of the ethnic Turks, the population of Bulgaria was around 9 million people.

188 In 2001 the scope of the parallel economy in Bulgaria was estimated at 36% of the GDP. Cf.: Watanabe N. (2006).

189 http://www.sofiaecho.com/article/social-security-contributions-in-bulgaria/id_18355/catid_23/search_1, article of 30 August 2006, accessed 26 February 2007.

### 2.3.5 Summary

The comprehensive reform of Bulgaria's pension system between 2000 and 2002 set into operation a three-pillar system, typical of countries seeking modern solutions in this area. A big shortcoming of the reform, however, is that the pay-as-you-go method of the 1st pillar lacks the individualization of the system's income. Judged from a modern perspective, the value of the pension reform in Bulgaria is significantly smaller than it could be.One interesting element of Bulgaria's pension system is that, unlike in other countries, the system treats category I and II employees on special terms. There seem to be arguments for the introduction of such a solution in other countries, thus letting the employees who perform their work in difficult conditions feel that the pension system appreciates their situation.

## 2.4 CYPRUS

### 2.4.1 General information about the country

The Republic of Cyprus[190] (Greek: *Κυπριακή Δημοκρατία*, Turkish: *Kibris Cumhuriyeti*) is an island country consisting of six districts, occupying the island of Cyprus situated in the eastern Mediterranean, off the coasts of Turkey, Syria, and Lebanon.

Official languages are Greek and Turkish. The Greeks, amounting to 77% of the population, were the largest ethnic group, the Turks, constituting 18% of the population, were the largest ethnic minority. 78% of the population were the members of the Autocephalous Orthodox Church, while 18% were Islamic.

According to the Constitution of 1960, the President is the head of state as well as leader of the government[191].

[190] *Wielka Encyklopedia PWN* (2002), v. 6, pp. 255 and further.

[191] During the latest presidential election in the Turkish Republic of Northern Cyprus, which took place on 17 April 2005, Mehmet Ali Talat was elected a President.

Since 1 May 2004 Cyprus has been a member of the European Union. On 1 January 2008, Cyprus entered the Economic and Monetary Union and replaced the Cypriot pound with the euro[192].

The current currency is the euro.

The GDP *per capita* (PPP) was estimated in 2007 at US$27,100[193], and the GDP growth rate at 3.9%[194]. The public debt amounted to 61.5% of the GDP. The current national account at the end of 2007 showed a deficit of US$1.236 billion.

The unemployment rate was 3.8%.

In July 2007 the population of Cyprus was 788,457[195], with the following age groups: 0-14 years of age – 19.9%, 15-64 years of age – 68.3%, 65 and older – 11.8%. The overall life expectancy at birth was 77.98 years, where men reached on average 75.60 years and women 80.49 years.

### 2.4.2 Historic development of the pension system in Cyprus

The first Cypriot regulation in the area of the old-age income concerned accident insurance and was introduced in 1942[196]. The true beginning of the pension system in Cyprus took place in **1956**, when the country – then a British colony – was enrooted into Beveridge[197] regulation of

[192] The Cypriot pound (CYP) was converted into the euro (EUR) at the exchange rate of CYP0.585274 for EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 31 March 2008.

[193] In the Turkish Republic of Northern Cyprus – only US$7,135.

[194] In the Turkish Republic of Northern Cyprus – 10.6%.

[195] https://www.cia.gov/library/publications/the-world-factbook/geos/cy.html, accessed 31 March 2008. The data presents demographic situation including the northern part of the island, where exists political organism called the Turkish Republic of Northern Cyprus – not recognized by any country except Turkey.

[196] *Social Security Programs Throughout the World: Europe, 2002* (2002), p. 58.

[197] These rules were earlier formulated by the British economist and social reformer William Henry Beveridge, who presented his views in 1942 in the work *Social Insurance and Allied Services,* also known as the Beveridge Report. More on this topic the reader can find in the book by Jakub Wiśniewski: Wiśniewski J. (2005).

old-age contributions and benefits[198], introduced at that time in the United Kingdom. The system, whose operation started at the beginning of 1957[199], provided for pension benefit entitlement for all old-age citizens. 1957 was also the year of introduction of sickness insurance and unemployment benefits[200]. In 1964 a reform took place that introduced obligatory pension insurance for those employed full-time and the self-employed. The system provided for the constant pension contribution and constant pension benefit[201]. On 6 October 1980, a comprehensive reform of social insurance was launched that made all employees and the self-employed pay pension contributions[202]. Women paid contributions until the age of 63, men until 65. In the case of women born before 1 January 1935, the standard retirement age was 63. The reform of 1980 related both pensions and contributions to remunerations[203] and introduced indexation of pensions[204]. The pension benefit was equal to 60% of average remunerations in the contribution years after 5 October 1964 and was paid on the weekly basis. In the case of people whose employment started after that date, the average (also weekly) wage calculation period started in the year when the person in case turned 16 and finished together with the last week of paying contributions. The benefit paid to a male retiree was increased by 1/3 for the first and by 1/6 for each following dependent person. In the case of a retired woman, the benefit was increased by 1/6 per each dependent person[205]. In 1987, the first act on family benefits was passed[206]. In 1995 a law was introduced that gave entitlement to social pension to all those who were older than the retirement age and were

198 Pashardes P. (2003), p. 28.
199 Precisely on 7 January 1957. Cf.: *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 5.
200 *Social Security Programs Throughout the World: Europe, 2002* (2002), pp. 57-58.
201 *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 5.
202 Pashardes P. (2003), p. 34.
203 *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 5.
204 *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 9.
205 Pashardes P. (2003), p. 38.
206 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 74.

not entitled to retirement benefit[207]. In 1998 a scheme was launched[208] to gradually increase the pension age for women from 63 to 65. At the beginning of 2000, the Senior Citizens' Parliament was created in Cyprus – a public organization of consultative character, where pensioners can express opinions on matters that concern them. In 2001, following a motion of this Parliament, the so-called Social Charter was issued to provide privileges for people who are older than 63 and participate in public and cultural life of the country. The charter includes an inventory of various discounts for the elderly for hotels, transportation, medical services. In 2001 the social pension was equal to €230 per month[209]. In 2002 the government introduced a special pension supplement[210] for those who were elderly and poor, and modified the rules of payment of family benefits for children[211]. In 2002 the retirement contribution was calculated on that part of the income that did not exceed CYP412 per week[212]. In the year 2004 the budgetary expenditure on the pension system was equal to 2.3% of the GDP[213]. In 2005 it was decided that the retirement age of civil servants will be gradually increased from 60 to 63 years in the period from July 2005 to July 2008[214]. The Act of November 2006 provided a legal framework for voluntary pension funds operating on capital markets[215].

207 *Social Security Programs Throughout the World: Europe, 2002* (2002), p. 56.
208 Pashardes P. (2003), p. 26.
209 Pashardes P. (2003), p. 49.
210 *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 15.
211 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 74.
212 *Social Security Programs Throughout the World: Europe, 2002* (2002), p. 56.
213 *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 24.
214 *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 12.
215 Cf.: *Cyprus: Pensions law* (2007).

### 2.4.3 The present state of the pension system in Cyprus – as of 31 December 2007

The Cypriot pension system consists of two public and one individual pillars: 1) the social pension scheme, 2) the social insurance scheme[216], and 3) the voluntary provident funds[217]. Voluntary pension insurance based on capital markets has not taken any institutional shape yet, even though such a possibility has existed since the beginning of 2007. The present state of the pension system in Cyprus is presented in **Scheme no. 4**.

**Scheme no. 4**

**The present state of the pension system in Cyprus**

| **1st pillar** | **2nd pillar** | **3rd pillar** |
|---|---|---|
| the social pension scheme | the social insurance scheme | the voluntary provident funds |

Source: Own elaboration.

**The social pension scheme** is funded by taxes and embraces all people who are at least 65 years of age[218] and not entitled to any other type of pension. In order to qualify for a social pension, one has to have lived in Cyprus for at least 20 years since the year they turned 40, or for 35 years since the year they turned 18[219]. Those whose yearly income from retirement pension does not exceed CYP6,500 receive a special pension supplement[220]. The social pension plus the pension supplement amount

216 Pashardes P. (2003), p. 31.

217 *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 12.

218 Pashardes P. (2003), p. 19.

219 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 69.

220 *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 5.

together to around 32% of the net average remuneration[221]. The major beneficiaries of this benefit are women – in towns mainly housewives, in the country single daughters of farmers who stayed and worked with their parents[222].

The participation in **the social insurance scheme** is mandatory. The system embraces all the employed who paid pension contributions[223] between the age of 16 and 64[224]. Retirement entitlement is granted to those who are at least 65 years of age and paid retirement contributions for at least 10 years. The system does not cover women working in agriculture[225]. There is a possibility of early retirement at 63 to those who worked for at least the minimum required number of years and earned on average not less than 70% of the pension calculation base[226]. Miners are entitled to retirement at the age of 63, minus one month for every 5 months of work in the mine, but not earlier than at 58[227]. The governmental employees, that is civil servants, teachers, the police and the army, and the employees of the semi-government, which include employees of local government and other public organizations[228], normally retire at 62[229], although earlier retirement at 55 is also an option[230]. In the case of people

221 In 2003 its value was, including the social supplement, CYP2,376 per year. Cf.: *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), pp. 6 and 14.

222 In 2003, 95% of beneficiaries were women. Cf.: *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 10.

223 Pashardes P. (2003), p. 31.

224 *Social Security Programs Throughout the World: Europe, 2002* (2002), p. 56.

225 Pashardes P. (2003), p. 52.

226 *Social Security Programs Throughout the World: Europe, 2002* (2002), p. 56.

227 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 69.

228 *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 5.

229 Since 1 July 2005, the standard retirement age for the government and semi-government employees has been in the process of systematic increase from 60 to 63 years of age, which will be reached on 1 July 2008. On 1 January 2007, it was 62 years. Cf.: *Synthesis Report on Adequate and Sustainable Pensions. Annex. Country Summaries* (2006), p. 58.

230 Pashardes P. (2003), p. 41.

employed in the private sector, the pension contribution is 16.6% of the gross remuneration[231], of which 6.3% is paid by the employer, 6.3% by the employee, and 4.0% by the state[232]. The contribution of the self-employed is 15.6% of the declared income, of which 11.6% is paid by the insured, and 4.0% is subsidized by the state[233]. The pension contribution is paid on incomes up to a certain level[234], equal to CYP479 per week[235]. The system opens up the possibility of voluntary payment of contributions for longer than the minimum period. If a volunteer works in Cyprus, their contribution equals to 13.5% of their remunerations, of which 10.0% is paid by the contributor and 3.5% by the state. In the case of employees of Cypriot companies working abroad, their contributions are equal to 16.6% of their remunerations, of which 12.6% is paid by the employee and 4.0% by the state[236]. The amounts paid as retirement contributions reduce income before tax. The contributions are accumulated in a special interest-yielding bank account in the central bank (*Κεντρική Τράπεζα της Κύπρου*)[237]. The size of the retirement benefit depends on two elements: 1) the base part, equal to 60% of the average remuneration of at least 3 years in the period starting on 1 October 1964 or at the 17$^{th}$ birthday of the insured, and of the additional part, calculated as a bonus for each contribution year after October 1980; the bonus equals to 1.5% of average remunerations in the given contribution year[238]. In the case of the governmental employees, the amount of the pension benefit equals to 2/3 of the last remuneration after 33 years and 4 months of participation

231 In 2003 the average remuneration for contribution calculation was CYP9,077 per year, and the average remuneration – CYP11,616 per year. Cf.: *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 18.

232 Pashardes P. (2003), p. 33, and *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 10.

233 Pashardes P. (2003), p. 33.

234 In 2003 it was equal to €3,205 per month. Cf.: *Synthesis Report on Adequate and Sustainable Pensions. Annex. Country Summaries* (2006), p. 58.

235 As of 2006. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 69.

236 Pashardes P. (2003), p. 33.

237 Pashardes P. (2003), p. 46.

238 *Synthesis Report on Adequate and Sustainable Pensions. Annex. Country Summaries* (2006), p. 58.

in the system[239]. The retirement benefits are indexed in these years when the remuneration and consequently the calculation base increase by more than 5%[240]. If the retirement takes place later than at the standard retirement age, the pension benefit is increased by 0.5% for each month above the required retirement age, but this can be continued only until reaching 68 years of age[241] and the benefit increase cannot exceed 15%[242]. The system provides for a minimum pension, whose amount, together with a special bonus, is 9% higher than the minimum social income, and equals around 35% of the average net remunerations[243]. The pension is paid 13 times a year[244].

**The voluntary provident funds** apply exclusively to the employees of the private sector[245] and are financed by contributions paid jointly by employers and employees. The average contribution is equal to 11.4% of the remuneration. The largest number[246] of such funds is organized by individual companies from the civil construction and hotel sector. Additionally, there are funds organized by trade unions operating across a number of companies.

### 2.4.4 Challenges and planned changes in the pension system in Cyprus

The main problem that Cyprus will have to face in the near future is connected with the ageing society. The percentage of those aged more than

239 *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 11.
240 Pashardes P. (2003), p. 39.
241 Pashardes P. (2003), p. 42.
242 *Social Security Programs Throughout the World: Europe, 2002* (2002), p. 56.
243 In 2003 the minimum yearly pension benefit for a person living alone was CYP1,926, increased by the social supplement of CYP650. Cf.: *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), pp. 6 and 13.
244 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 70.
245 *Synthesis Report on Adequate and Sustainable Pensions. Annex. Country Summaries* (2006), p. 58.
246 In 2001 such funds had 103 thousand members, of which 65% worked in companies employing up to 19 employees. Cf.: *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 12.

65 years, being currently 11.6%, may have increased to 17.6%[247] by 2028, and even have reached 28%[248] by 2050. Moreover, the number of people aged over 80 may have doubled by 2028[249]. The actuarial estimations indicate that in 2010 the pension system may lose its self-financing capability[250]. In effect, initiatives should be taken to rise the effective retirement age by gradual elimination of possibilities of early retirement. Most likely, there will also be changes in the amounts of contributions. Moreover, it is anticipated that capital markets will have to be actively used for investment of pension contributions. Keeping those contributions in an interest-yielding account in the central bank does not allow for optimal use of the capital[251]. Also, the method of indexing pensions is expected to change from wages dependent to one that will follow changes in the cost of living[252]. Another on-coming change will be to reduce the governmental subsidy to the system by reducing the state share in contributions to the level of 2%[253]. It is thought to be feasible as the current balance of the pension system shows certain reserves[254]. A consequence of Cyprus's accession to the European Union is economic emigration of young people and following decrease in the number of contribution-payers. Therefore, the following changes are being considered[255]:

- to increase the retirement age to 65,
- to increase the minimum number of contribution years necessary for pension,

[247] Pashardes P. (2003), p. 46.
[248] *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 19.
[249] Pashardes P. (2003), p. 46.
[250] Pashardes P. (2003), p. 50.
[251] Pashardes P. (2003), p. 46.
[252] Pashardes P. (2003), p. 47.
[253] Pashardes P. (2003), p. 49.
[254] For example, in 2003 in order to pay all pension benefits the system needed an amount corresponding to 14.4% of the contributions paid by all members of the system, whereas the actual contribution was 16.6%. Cf.: *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 10.
[255] *National Strategy Report on Adequate and Sustainable Pensions, Republic of Cyprus* (2005), p. 30.

- to change the method of indexation of retirement benefits,
- to increase gradually pension contribution,
- to modify the contributions of the self-employed,
- to introduce pre-retirement benefits for the unemployed,
- to introduce special financial privileges for the poorest.

The most recent[256] observations of the International Monetary Fund confirm the immediate necessity to introduce changes to the Cypriot pension system, at least of parametric nature.

### 2.4.5 Summary

The Cypriot pension system has, so far, been able to provide for the elderly. However, in comparison with other European countries the situation cannot be called satisfactory, as more than half of the retirees still remain close to the poverty line[257]. At the end of 2006, the average retirement benefit was equal to 41% of the average remuneration[258]. Besides, nowhere else in Europe is there a situation that the resources of the pension system are higher than its pension expenditure. In effect, there is no need for direct governmental subsidy to the system due to the lack of its balancing. It must be remembered, however, that the balancing of the system is only possible because the government subsidizes the contributions themselves at the level of 4% of the remunerations. The seeming viability puts aside much of the interest in the modification of the system. Cyprus belongs to those few countries where there was no attempt to introduce systemic changes in financing old-age income in the 1990s; the last reform took place in Cyprus in 1980. The demographic situation is a jeopardy to the system, which, if not counterbalanced by changes, will bring about problems possibly as soon as in 2010. No structural reforms that could prevent future insolvency have so far taken place. The only harbinger in this respect is the introduction in January 2007 of the legal

256 Cf.: Spiteri A. (2007).
257 They are in the range from CYP197 to CYP300. Cf.: Leonidou L. (2007).
258 Zaidi Z., Grech A.G., Fuchs M. (2006), p. 24.

possibility of voluntary pension schemes based on capital markets[259].

As far as interesting ideas in the pension system in Cyprus are concerned that could be implemented in other countries, the Senior Citizens' Parliament stands out as a unique form of representation of the elderly.

## 2.5 THE CZECH REPUBLIC

### 2.5.1 General information about the country

The Czech Republic[260] (*Česká republika*) is a landlocked country in central Europe comprised of 13 regions and an autonomous city (*hlavni mesto*), i.e. Prague.

The official language is Czech. The largest ethnic group were the Czech (90.4% of the population). The majority of inhabitants, as many as 59%, declared not to be the followers of any religions. The largest religious group were the Catholics (26.8%).

According to the Constitution of 1992[261], the head of the state is the President, and the government is led by the Prime Minister.

In 1999 the Czech Republic became a member of NATO, and in 2004 of the European Union.

The currency in the Czech Republic is the Czech koruna (CZK[262], *Koruna česká*).

The GDP *per capita* (PPP) was estimated in 2007 at US$24,400, with a growth rate of 5.7%, the public debt was 31.1% of the GDP; the current national balance at the end of 2007 showed the deficit of US$5.701 billion.

The unemployment rate was 6.6%.

259 Cf.: *Cyprus: Pensions law* (2007).

260 *Wielka Encyklopedia PWN* (2002), v. 6, pp. 347 and further.

261 It came into force on 1 January 1993.

262 According to ISO 4217 standard. On 31 December 2007 EUR1 was worth CZK26.628. Cf.: http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-czk.en.html, accessed 28 March 2008.

In July 2007 the population of the Czech Republic was 10,228,744 people[263] with following age groups: 0-14 years of age – 14.1%, 15-64 years of age – 71.2%, 65 years of age and older – 14.7%. The overall life expectancy at birth was: 76.42 years, 73.14 years for men, and 79.88 years for women.

### 2.5.2 Historic development of the pension system in the Czech Republic

The beginnings of the pension system in the Czech Republic date back to the monarchy of Hapsburgs and are the continuation of the system based on the Bismarckian model of the Austro-Hungarian Empire. The first legal regulation concerned with accident insurance system comes from 1887[264], and the one concerned with health insurance, also covering benefits for people in old age, comes from 1888[265]. In **1906** the first legal regulation on pensions for white-collar workers appeared[266]. The Bismarck's model allowed for the existence of separate systems for particular occupational groups and covered at first civil servants, white-collar workers and miners. In 1924 a regulation covering blue-collar workers was introduced. These four occupational groups together with their employers paid insurance contributions, and retirement was allowed after turning 65[267]. Pensions consisted of the base part, equal for everybody, and the additional part, dependent on contributions paid individually. In 1929 a regulation on social pension based on income test was introduced. In 1945 the first legal regulation on family benefits appeared[268]. After the Communists took the power in 1948 the pension system was nationalised. In 1956 the retirement age of men was lowered to 60 years, and of women to 55

[263] https://www.cia.gov/library/publications/the-world-factbook/geos/ez.html, accessed 31 March 2008.
[264] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 79.
[265] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 78.
[266] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 76.
[267] Żukowski M. (2006), p. 129.
[268] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 81.

years[269], and new principles of accident insurance[270] and health insurance became valid from 1957[271]. In 1964 the retirement age for women was diversified depending on the number of children they have given birth to, and reached between 53 to 57 years. The year 1968 brought about a new law on maternity benefits[272]. In 1990 an accident insurance for self-employed people was introduced[273]. In 1990-1992 pension privileges for communist activists were abolished, and the discrimination of the self-employed within pensions was partially eliminated by leaving the base for pension contribution calculation for those people at the level of 35% of the net income[274]. In 1991 the first legal regulation concerned with unemployment appeared[275]. At the beginning of 1993 a principle saying that pension contributions should be a specially marked part of the tax paid by the citizens was introduced[276]. In 1994 it became possible to voluntarily accumulate money on additional pension benefits starting with the year 1996[277]. In 1995 a new pension act was introduced concerning the base system, which became valid at the beginning of 1996[278] and lowered the contributions on pension insurance from 27.2% to 26.0%[279]. Also in 1995 the law on family benefits was amended[280]. On the basis of the law of 1994, in 1996, 44 pension funds were set up to enable voluntary accumulation of pension resources[281]. Also at that time pension contributions within the base system became treated as a special state income, recorded on a special budget account[282]. From 1997 the number of non-contributory

269 Żukowski M. (2006), p. 130.
270 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 79.
271 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 78.
272 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 78.
273 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 79.
274 Chłoń-Domińczak A., Mora M. (2006), p. 555.
275 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 80.
276 Tomeš I., Koldinská K., Němec J. (2003), p. 44.
277 Tomeš I., Koldinská K., Němec J. (2003), p. 30.
278 Tomeš I., Koldinská K., Němec J. (2003), p. 30.
279 Chłoń-Domińczak A., Mora M. (2006), p. 555.
280 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 81.
281 Tomeš I., Koldinská K., Němec J. (2003), p. 30.
282 Tomeš I., Koldinská K., Němec J. (2003), p. 45.

periods considered as participation in the pension scheme was lowered[283]. In 1999 the system of limited tax reductions on contributions transferred to voluntary pension funds was created. From 2001 some limits were imposed on the possibility of earlier retirement[284]. In 2001 government spending on the pension system constituted 29.2% of the budget spending, and at the same time 9.1% of the GDP[285]. From the beginning of 2002, a principle of pension indexation related to the increase in the cost of living was introduced[286]. In relation to minimum pensions, the indexation was supposed to constitute a combination of 100% of the increase in prices and 1/3 of the increase in real remunerations[287]. In 2002 contributions to the pension system amounted to 26%, 19.5% of which was paid by the employer, and 6.5% by the employee[288]. Full pension was granted to those who participated in the system for 25 years, and partial pension was granted after 15 contributory years[289]. The retirement age was set at 60 years for men and 53-57 years for women[290]. In 2002 there were only 11 pension funds present in the market, which offered the possibility of voluntary accumulation of pension resources[291]. In 2003 parametric reforms of the pension system took place, which became effective at the beginning of 2004. The reforms concerned the following:

- the significant decrease of non-contributory periods within higher education considered as a period of participation in the pension system,
- the elimination of earlier retirement with only temporary decrease inbenefits,

283 Chłoń-Domińczak A., Mora M. (2006), p. 555.
284 Chłoń-Domińczak A., Mora M. (2006), p. 555.
285 Tomeš I., Koldinská K., Němec J. (2003), p. 17.
286 Tomeš I., Koldinská K., Němec J. (2003), p. 27.
287 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 11.
288 Tomeš I., Koldinská K., Němec J. (2003), p. 25.
289 Tomeš I., Koldinská K., Němec J. (2003), p. 27.
290 Depending on the number of children that they have given birth to. Cf.: Tomeš I., Koldinská K., Němec J. (2003), p. 27.
291 Tomeš I., Koldinská K., Němec J. (2003), p. 30.

- the increase in the contribution calculation base for self-employed people from 35% of the net remuneration to 50%,
- the gradual increase in the retirement age to the level of 63 years for both sexes,
- the increase in pension contribution amount from 26% to 28%[292].

In 2004 pension contributions amounted to 28%, 21.5% of which was paid by the employer, and 6.5% by the employee[293]. On 1 July 2005, the register of people covered by the health and pension insurance was introduced[294]. This marked the beginning to the future individualisation within the recording of the pension contributions.

### 2.5.3 The present state of the pension system in the Czech Republic

The pension system in the Czech Republic comprises two elements, namely: 1) the obligatory system, based on the pay-as-you-go formula within the DB (defined benefit) convention[295] and 2) the voluntary system, which in international comparisons is analogous with the 3rd pillar[296]. In the Czech reality there is no obligatory system element which would invest the accumulated resources in capital markets[297]. The present state of the pension system in the Czech Republic is presented in **Scheme no. 5**.

[292] At the same time the contribution on the fund securing against unemployment was lowered by 2%. Cf.: Chłoń-Domińczak A., Mora M. (2006), p. 555.

[293] Żukowski M. (2006), p. 132.

[294] *National Strategy Report on Adequate and Sustainable Pension* (2005), p. 21.

[295] Defined benefit system.

[296] In one of the most recent analyses by Chłoń and Mora, the Czech solution in the text is interpreted as the 2nd pillar (p. 554); however, in the footnote (p. 571) they explain that according to the nomenclature of the World Bank, the Czech 2nd pillar should be defined as the 3rd pillar. Cf.: Chłoń-Domińczak A., Mora M. (2006).

[297] In the report of the Czech government of 2005, we even read that there is no intention of introducing it. Cf.: *National Strategy Report on Adequate and Sustainable Pension* (2005), p. 2.

**Scheme no. 5**

**The present state of the pension system in the Czech Republic**

| **1st pillar** | **3rd pillar** |
| --- | --- |
| the obligatory system, based on the pay-as-you-go formula within the DB (defined benefit) convention | the voluntary system |

Source: Own elaboration.

Within **the obligatory system** in 2008 the retirement age for men is 61 years and 10 months, and for women ranges from 56 and 4 months to 60 years and 4 months[298], depending on the number of children they have given birth to[299]. The system is uniform and does not provide any privileges for particular occupational groups[300]. It is possible to retire three years earlier if a given person paid contributions for 25 years. Earlier retirement means agreeing to a permanent pension reduction in the amount of 0.9% of its value for each quarter of earlier retirement[301]. It is also possible to receive full pension benefits after 15 contributory years at the age of 65 years[302]. Postponing retirement is awarded with the increase in the base pension benefits by 6% a year[303] – 1.5% for each quarter of later retirement[304]. There are no age limits concerned with

[298] The retirement age for men is increased every year by 2 months, and for women by 4 months. The final retirement age for men and childless women will reach 63 years, and for women who have had children, from 59 to 62 years. The final retirement age for men will be reached in 2015, and for women in 2028.

[299] Childless women retire at the age of 60 years and 4 months, whereas the ones who have given birth to five children or more, at the age of 56 years and 4 months.

[300] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 76.

[301] *Synthesis report on adequate and sustainable pension. Annex. Country summaries* (2006), p. 11.

[302] Whitehouse E. (2007), p. 133.

[303] Żukowski M. (2006), p. 132.

[304] *Synthesis report on adequate and sustainable pension. Annex. Country summaries* (2006), p. 11.

postponed retirement[305]. The required participation period in the pension system entitling to full standard pension amounts is the last 25 years of paying contributions. A single pension contribution amounts to 28% of the remuneration and is paid in 21.5% by the employer and in 6.5% by the employee. The system does not specify the minimum and the maximum remuneration level subject to paying insurance contributions[306]. In the case of the self-employed, the contribution amounts to 28% of the income[307], where the income is treated as a 50% difference between the receipts and the tax deductible expenses[308]. Those people also have a determined level of the minimum contribution, as well as the upper base amount for calculating insurance contributions[309]. Pension is composed of two elements: 1) the fixed part, determined by the rules of law, and 2) the variable part, dependent on the amount of the paid contributions[310]. The fixed part is a uniform amount for all the pensioners[311], irrespective of the insurance period and the value of income. In the variable part, for each contributory year a pensioner receives 1.5% of the individual calculation base. This is calculated on the basis of the average gross remuneration from the last 11 years[312]. The system allows for the functioning of a minimum pension[313]. Pensions are subject to the individual income tax with up to CZK144,000 of a yearly income[314].

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305 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 76.

306 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 76.

307 *Synthesis report on adequate and sustainable pension. Annex. Country summaries* (2006), p. 11.

308 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 76.

309 In 2006 the minimum contribution amounted to CZK4,709, and the upper base amount – CZK486,000 of the yearly income.

310 Tomeš I., Koldinská K., Němec J. (2003), p. 34.

311 In 2004 it reached CZK1,310, and in 2006 – CZK1,470. Cf.: Żukowski M. (2006), p. 132 and *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 77.

312 The period considered while estimating the pension calculation base is increased every year, from 10 years in 2006 to final 30 years in 2025.

313 This amount consists of a base component – in 2004 it was CZK1,310 – and a minimum individual component dependent on the remuneration at the level of CZK770. Cf.: Whitehouse E. (2007), p. 133.

314 Whitehouse E. (2007), p. 134.

**The voluntary system** of accumulating pension resources is rather insignificant[315] due to a low scope of tax reductions related to the functioning of this pillar. Despite this fact, the number of participants in this system reaches about 2.5 million people. Each person who turned 18 and is a permanent resident of the Czech Republic or lives in a different Member state of the European Union, is allowed to be a participant of this system. The minimum contribution amount is set at CZK100. It is possible to be a participant of only one pension fund at a time. The system provides a government subsidy in the amount from CZK50 to CZK150 a month[316]. The average contribution paid to the system constitutes only 2% of the average remuneration. It seems that the factor preventing higher engagement in the pension funds is a low rate of return on investment reached by those funds[317].

### 2.5.4 Challenges and planned changes in the pension system in the Czech Republic

The most important challenge that the pension system in the Czech Republic is facing consists in unfavourable demographic changes – this concerns the decreasing number of young people in the population[318] and the increasing number of older people[319]. The total fertility rate of the Czech women between the years 2000 and 2005 was only 1.18, i.e. one of the lowest levels in the world[320]. At the same time life expectancy is

315 In 2001 the number of participants reached 2.5 million people, who, however, accumulated rather small resources. Cf.: Tomeš I., Koldinská K., Němec J. (2003), p. 30.

316 *National Strategy Report on Adequate and Sustainable Pension* (2005), p. 6.

317 In the period between 1995 and 2004, a real rate of growth reached 0.8% a year. Cf.: *Synthesis report on adequate and sustainable pension. Annex. Country summaries* (2006), p. 11.

318 At the moment of the establishment of the Czech Republic at the end of 1992, the number of those aged 0-14 reached 20.0% of the population, and in 2006 only 14.4%. At the beginning of the 21st c., the Czech authorities even promoted a procreation slogan \`Follow Bach's example…'; however, it was unsuccessful. As a reminder – Johann Sebastian Bach was a father of twenty legitimate children.

319 Tomeš I., Koldinská K., Němec J. (2003), p. 8.

320 Cf.: *World Population Prospect: The 2006 Revision* (2007). The confirmation of this amount is also given in the *National Strategy Report on Adequate and Sustainable Pension* (2005), where on p. 1 the value given for the year 2003 is 1.18.

increasing. Despite this fact, there are no plans as to linking the pension system with capital markets. The changes scheduled for 2003 were limited to parametric reforms within the following areas[321]:

- the increase in the retirement age to 65 and equalising it for men and women,
- the prolongation of the contributory period from 25 to 40 years,
- limiting the pension amount received after a deceased family member,
- the increase in the share of the part dependent on the value of contribution in pension calculation,
- the increase in tax reductions for accumulating pension contributions in voluntary pension funds.

The only proposed system change dealt with separating the pension service from the budget and submitting it to an independent governmental agency. The report of the Czech government prepared in 2005[322] included a record on increasing the contributory period to 30 years in 2016. A more recent document[323] on the retirement age suggested equalising the retirement age for men and women at 63 years from 2013[324]. Poorly developed capital markets[325] constitute a certain restriction on the functioning of the pension funds, which makes it necessary to allocate the resources on treasury bonds of low profitability. The level of pension benefits[326] is not as important for the situation in the Czech Republic, since only 2-3% of the pensioners receive the minimum pension[327]. However, what is important for the future of the pension system in the Czech

321 Tomeš I., Koldinská K., Němec J. (2003), p. 47.

322 *National Strategy Report on Adequate and Sustainable Pension* (2005), p. 5.

323 Whitehouse E. (2007), p. 133.

324 However, leaving a flexible retirement age between 59 and 63 years for women depending on the number of children they have given birth to.

325 On 14 December 2007, on the main floor of the Prague Stock Exchange (*Burza cenných papírů Praha*) there were 21 companies.

326 Despite the fact that the proportion between the average pension and the average remuneration has been decreasing in the last few years. Cf.: *National Strategy Report on Adequate and Sustainable Pension* (2005), p. 4.

327 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 25.

Republic is the political factor[328] – the socialists opt for retaining the present social security system, whereas their opponents indicate the need of introducing solutions with obligatory pension funds[329]. The most recent reviews of the World Bank, on the other hand, suggest the possibility of implementing the system of NDC (notional defined contribution) in the Czech Republic to replace the existing DB (defined benefit) solution[330]. It is anticipated that the parametric changes introduced so far will allow for the functioning of the system for about 20 years. According to those forecasts, after the year 2025 the country will deal with a rapid growth of expenses, which will make it difficult to sustain system stability[331].

### 2.5.5 Summary

The pension system in the Czech Republic is to a large extent a continuation of the solutions applied before the economic changes of 1989. The basic element of the continuation consists in maintaining the pay-as-you-go solution without the intention of introducing any changes. This remains in contrast with the basic changes in the functioning of the pension systems in the neighbouring countries, such as Poland or Hungary. Parametric reforms of 1995 and 2003 allow for the existence of the present system, with the awareness that after the year 2025 the system will go bankrupt. An exceptionally unfavourable demographic situation already influences and will even more strongly influence the condition of the pension system in the Czech Republic. In the recent years a number of ideas, analyses and simulations appeared[332], which however do not result in any concrete decisions. It seems that the introduction of changes aiming at linking the pension system with the capital markets is the challenge that the Czech Republic sooner or later will not be able to avoid. Among

328 Cf.: Klein F. (2006).

329 Żukowski M. (2006), p. 135.

330 Chłoń-Domińczak A., Mora M. (2006), p. 551.

331 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 14.

332 Cf.: Cevik R., (2006), Hemmings P., Whitehouse E. (2006) and *Economic Survey of the Czech Republic 2006* (2006).

the interesting solutions present in the Czech pension system which could inspire other countries while conducting international comparisons, we would only point to relating the retirement age of women to the number of children to whom they have given birth. Perhaps this solution should be modified in capital systems; however, the sole idea of relating the retirement age of women to the number of children to whom they have given birth had seems interesting.

## 2.6 DENMARK

### 2.6.1 General information about the country

The Kingdom of Denmark[333] (*Kongeriget Danmark*) is a monarchy situated in north-west Europe, between the North Sea and the Baltic Sea, in the middle and northern part of the Jutland Peninsula and on 406 islands[334], 79 of which are inhabited. According to the new administrative division, Denmark comprises 5 regions (*regioner*) and 8 communes (*kommune*). Moreover, Denmark owns two autonomous territories – Greenland and the Faroe Islands.

The official language is Danish. The largest ethnic group were the Danes (95.0% of the population). The followers of the Evangelical Church constituted 95.0% of the population.

Pursuant to the Constitution of 1953, the head of the state is the King[335], and the government is led by the Prime Minister.

In 1949 Denmark became a founder member of the NATO, and in 1973 it joined the European Communities. In the referendum of 2000 Denmark rejected the proposal of joining the economic and monetary union, and kept the kroon as its national currency.

333 *Wielka Encyklopedia PWN* (2002), v. 6, pp. 502 and further.
334 The largest are Zeland, Vendsyssel-Thy, Fionia, Lolland, Bornholm and Falster.
335 Since 14 January 1972 – Margrethe II. The full royal title in Danish is as follows: *Hendes Majestœt Dronning Margrethe II*.

The current currency in Denmark is the Danish kroon (DKK[336] *krone*).

The GDP *per capita* (PPP) was estimated in 2007 at US$37,400, with a growth rate of 1.7%, the public debt was 26.1% of the GDP; the current national balance at the end of 2007 showed the surplus of US$4.699 billion.

The unemployment rate was 3.5%.

In July 2007 the population of Denmark was 5,468,120 people[337] with the following age groups: 0-14 years of age – 18.6%, 15-64 years of age – 66.0%, 65 years of age and older – 15.4%. The overall life expectancy at birth was 77.96 years, 75.65 years for men, and 80.41 years for women.

### 2.6.2 Historic development of the pension system in Denmark

The pension system in Denmark dates back to 1849, when a pension system (*tjenestemandspension*) covering a part of public sector workers was established[338]. In **1891** the first public pension system was set up in this country[339]. The system was based on a non-contributory solution, fully covered from taxes. 28% of the pension value was financed from central budget, whereas the remaining part came from local budgets. Each time the value of the pension benefit was determined by the commune. People entitled to pension benefits were those who turned 60 and did not receive any other income[340]. The first law on health and maternity insurance appeared in 1892[341]. In 1898 the first legal regulation on accident insurance was passed[342]. In 1907 the first legal regulation within

336 According to ISO 4217 standard. On 31 December 2007 EUR1 was worth DKK7.4583. Cf.: http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-dkk.en.html, accessed 25 March 2008.

337 http://www.cia.gov/library/publications/the-world-factbook/geos/da.html, accessed 31 March 2008.

338 Bingley P., Datta Gupta N., Pedersen P. J. (2004), p. 155.

339 Green-Pedersen Ch. (2007), p. 464.

340 Więckowska B. (2004), p. 71.

341 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 84.

342 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 86.

protection against unemployment was passed[343]. In 1921 a new legal solution concerning handicapped pensioners appeared[344]. In 1933 the law on accident insurance was amended[345]. In 1945 the Pension Fund for the Workers of the Local Government (*Kommunernes Pensionsforsikring a/s*, KP a/s) was established[346]. In 1952 the first law on family benefits was introduced[347]. In 1956 the right to pension benefits was no longer dependent on the pensioner's income, and the system of supply pensions was established (or folk pensions – *Folkepension*), financed from general taxes and functioning within the pay-as-you-go formula. This solution was available for all the residents of Denmark who turned 67[348]. The system was complimented with the possibility of voluntary accumulation of pension resources in the form of commercial pension insurance, with the additional encouragement in tax reductions[349]. At the beginning of the 1960s, 20% of the total number of employees participated in various occupational pension systems, however, the majority of them were not the blue-collar workers, but the workers of public institutions and the national health services[350]. In 1964 a mandatory public system of complimentary pensions dependent on previous earnings and operated by an independent institution (*Arbejdsmarkedets Tillægspension*, ATP)[351] was established. However, the dependency on earnings in this system concerned only the number of hours worked multiplied by a fixed rate (1.5%), calculated from the average remuneration[352]. In 1970 the law on protection against unemployment was amended[353], in 1971 the law on

343 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 87.
344 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 82.
345 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 86.
346 http://www.kp.dk/media(811,1030)/KP_-_Annual_Report_2006.pdf, accessed 28 December 2007.
347 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 88.
348 Green-Pedersen Ch. (2007), p. 464.
349 Więckowska B. (2004), p. 72.
350 Green-Pedersen Ch. (2007), p. 465.
351 http://www.atp.dk/www/portal.nsf/mainfrms!ReadForm&Expand=0&Area=ATPKoncernLanguage, accessed 5 May 2007.
352 Green-Pedersen Ch. (2007), p. 465.
353 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 87.

health insurance[354], and in 1978 the law on accident insurance concerned with accidents in industry[355]. In 1979 the programme of earlier retirement appeared[356], the introduction of which was justified with the need for creating new jobs for young people[357]. At the same time a solution weakening the results of inflation was introduced (*Lønmodtagernes Dyrtidsfond*, LD)[358]. At the beginning of the 1980s about 35% of the total number of employees participated in various occupational pension systems[359]. In 1984 a new law on pension and disability insurance was introduced[360], which combined the pension system with the system of the so-called 'anticipation benefits'[361] (*førtidspension*). In the same year the capital gains of private pension schemes were taxed with the income tax of 3.5%[362]. In 1986 a new legislation on early retirement appeared[363], and the law on family benefits was amended[364]. As a result of those amendments, the criteria considered while granting pension allowances were lowered, and in 1987 the level of the allowances was additionally increased[365]. In 1989 the principles concerning the payment of benefits from health insurance were modified[366]. In 1990 a legal possibility of organising company pension schemes was introduced[367], and additionally the rules of pension indexation changed from the indexation related to

354 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 84.
355 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 86.
356 Bingley P., Datta Gupta N., Pedersen P. J. (2004), p. 153.
357 Bingley P., Datta Gupta N., Pedersen P. J. (2004), p. 156.
358 http://www.ld.dk/Default.aspx?ID=792, accessed 28 December 2007.
359 Green-Pedersen Ch. (2007), p. 466.
360 Więckowska B. (2004), p. 74.
361 The general term `anticipation´ means `looking ahead, predicting or supposing something not yet existing´. In the case of the Danish pension system it means granting benefits to the handicapped and people entitled to early retirement.
362 Green-Pedersen Ch. (2007), p. 471.
363 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 82.
364 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 88.
365 Green-Pedersen Ch. (2007), p. 471.
366 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 84.
367 Więckowska B. (2004), p. 72.

price increase to the indexation related to real income increase[368]. In 1992 the programme of pre-retirement transitional benefits for the unemployed aged 55-59 was introduced[369]. From 1993 capital gains were no longer taken into consideration while calculating pension amounts[370]. Moreover, in that year changes in calculating base pensions were introduced, which meant lowering their amounts but compensating it with higher pension allowances[371]. In 1995 spending on the public pension system reached 8% of the GDP[372]. In 1997 a public system of special complimentary pensions was set up (*Den Særlige Pensionsopsparing*, SP) with a fixed contribution rate equal to 1% of the gross remuneration[373]. In 1999 the decision on lowering the retirement age from 67 to 65 from 1 July 2004 was taken[374]. From 1 January 2002, fully capital rules were introduced to the functioning of the SP system, without the elements of redistribution[375]. On 1 January 2003, a public complimentary pension system for people receiving anticipation pensions was established (*Den Supplerende Arbejdsmarkedspension for Førtidspensionister*, SAP)[376]. Moreover, in 2003 an additional pension allowance paid once a year for pensioners on low income was introduced[377]. In various occupational pension systems the number of participants amounted to 80% of hired workers[378]. Since the beginning of 2004 the standard contribution on company pension schemes was increased from 9.0% to 10.8% of the remuneration within the agreements recommended by the Danish trade union confederation. From 1 July 2004, the retirement age was lowered from 67 to 65 years[379]

368 Green-Pedersen Ch. (2007), p. 471.
369 Bingley P., Datta Gupta N., Pedersen P. J. (2004), p. 156.
370 Bingley P., Datta Gupta N., Pedersen P. J. (2004), p. 154.
371 Green-Pedersen Ch. (2007), p. 472.
372 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 26.
373 Green-Pedersen Ch. (2007), p. 466.
374 Bingley P., Datta Gupta N., Pedersen P. J. (2004), p. 155.
375 Więckowska B. (2004), p. 76.
376 Więckowska B. (2004), p. 77.
377 *Synthesis Report on Adequate and Sustainable Pensions. Annex. Country Summaries* (2006), p. 17.
378 Więckowska B. (2004), p. 77.
379 Więckowska B. (2004), p. 90.

and, at the same time, new rules on later retirement were introduced[380]. In 2004 the amount of the average pension paid from the ATP scheme equalled €1,206 a year[381]. From 1 July 2005, the participants of the company pension schemes were allowed to transfer the accumulated resources to a selected pension fund[382]. In 2005 base pension from the public pension system equalled €7,586, and the pension allowance stayed at €7,636[383].

### 2.6.3 The present state of the pension system in Denmark

The pension system in Denmark comprises three levels: 1) the first level, covering five elements: a) the public pension system, b) the public system of complimentary pensions, based on previous earnings (ATP), c) the public system of special complimentary pensions (SP), d) the public system of complimentary pensions for people receiving anticipation benefits (SAP), and e) the solution weakening the results of inflation (LD) 2) the second level, covering: a) the company pension schemes, and b) the pensions for public sector workers, and 3) the third level, covering the individual pension schemes[384]. The present state of the pension system in Denmark is presented in **Scheme no. 6**.

380 *Synthesis Report on Adequate and Sustainable Pensions. Annex. Country Summaries* (2006), p. 17.
381 *The Handbook of Western European Pension Politics* (2007), p. 884.
382 *National Strategy Report on the Danish Pension System* (2005), p. 35.
383 *The Handbook of Western European Pension Politics* (2007), p. 883.
384 Więckowska B. (2004), p. 73.

**Scheme no. 6**

**The present state of the pension system in Denmark**

| | | |
|---|---|---|
| 3rd level | the individual pension schemes | |

| | | |
|---|---|---|
| 2nd level | the pensions for public sector workers | managed by SAMPENSION |
| | the company pension schemes | |

| | |
|---|---|
| 1st level | the solution weakening the results of inflation<br>*Lønmodtagernes Dyrtidsfond,* LD |
| | the public system of complimentary pensions for people receiving anticipation benefits<br>*Den Supplerende Arbejdsmarkedspension for Førtidspensionister*, SAP |
| | the public system of special complimentary pensions<br>*Den Særlige Pensionsopsparing*, SP |
| | the public system of complimentary pensions, based on previous earnings<br>*Arbejdsmarkedets Tillægspension*, ATP |
| | the public pension system |

Source: Own elaboration.

Within the first level the obligation of financing **the public pension system** is extended on all the citizens of Denmark[385] through taxes. The system is fully managed by the state and is based on the pay-as-you-go principle. The condition entitling to pension benefits is the minimum period of residence in Denmark of three years between the age of 15 and the retirement age. The retirement age is the same for men and women and equals 65[386]. For those who do not have the Danish citizenship, the minimum period of residence in Denmark is extended to 10 years, where

385 Więckowska B. (2004), p. 74.

386 For those born before 1 July 1939, the retirement age was 67. Cf.: *The Handbook of Western European Pension Politics* (2007), p. 883.

the last 5 years are the years directly preceding retirement. Full entitlement to pension benefits is available to those who lived in Denmark for 40 years between the age of 15 and 65[387]. If the period of residence in Denmark is shorter, the pension is proportionally lower. The benefits financed from this system are the base pension and the pension allowance[388]. The law determines the level of the full base pension[389] as 17% of the average remuneration[390]. Pension amount depends only on the actual income of the pensioner from other sources, as well as on his family status[391]. If the pensioner receives earnings exceeding DKK246,500 a year, the base pension is decreased by 30% in the scope exceeding this amount[392]. It is possible to retire early, at the age of 60, on condition that: a given person is a permanent resident of Denmark, was employed full-time for at least 10 years within the last 20 years, and worked between 12 to 30 hours a week in the remaining period. It is also necessary to participate in the ATP system for at least 10 years within the last 20 years[393]. It is possible to be entitled to the so-called regular early retirement as early as at the age of 50, if it is justified by the pensioner's health condition or social conditions. The system also allows for minimum pension benefits, which amount to 3/40 of the full pension. Pensions are indexed according to the rate of income growth, while if this growth is higher than 2%, 0.3% is allocated to a special fund managed by the government[394]. Apart from the base pension, the pensioner is entitled to a pension allowance[395]. Furthermore, once a year the pensioner with low income receives an

387 Więckowska B. (2004), p. 81.
388 *Synthesis Report on Adequate and Sustainable Pensions. Annex. Country Summaries* (2006), p. 17.
389 In 2003 it reached DKK54,204 annually, and in 2005 DKK56,892 a year. Cf.: *National Strategy Report on the Danish Pension System* (2005), p. 6.
390 Whitehouse E. (2007), p. 65.
391 In this respect, the Danish law equally treats spouses and those co-habiting.
392 *National Strategy Report on the Danish Pension System* (2005), p. 32.
393 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 82.
394 *The Handbook of Western European Pension Politics* (2007), p. 884.
395 In 2005 it amounted to DKK57,276 annually, i.e. more than the base pension, and in 2006 – DKK4,868 monthly (i.e. DKK58,416 annually). Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 83.

additional pension benefit[396]. In the case of postponed retirement, the taxation of the received income is lower and a higher pension is granted as a form of award[397]. The taxation system does not allow for any reductions or exemptions in the received pensions[398]. Pensioners, on the other hand, do not pay social insurance contributions. The system is managed by the local government units, however, it is fully regulated and monitored by the Ministry for Social Affairs[399].

**The public system of complimentary pensions dependent on the previous earnings** (ATP) is a complimentary element to the pensions received from the public pension system. The mandatory participants of the system are those aged from 16 to 64 years, who work for over 9 hours a week. No minimum participation period is required for being entitled to pension[400]. The amount of contributions does not depend on the earnings, but on the number or hours of work a week, and is divided into three levels. The contribution is paid in 2/3 by the employer, and in 1/3 by the employee[401]. In the case of people receiving transfer payments, 2/3 of the contribution is paid by the state[402]. The maximum contribution level paid by the employer reaches DKK975 a year[403] and it has increased in recent years[404]. The employer or the state pay a surcharge of maximum DKK1,949 a year[405]. Contributions are paid monthly or quarterly, and are

396 In 2005 in the amount of DKK6,200. Cf.: *National Strategy Report on the Danish Pension System* (2005), p. 32.

397 *Synthesis Report on Adequate and Sustainable Pensions. Annex. Country Summaries* (2006), p. 17.

398 Whitehouse E. (2007), p. 66.

399 *The Handbook of Western European Pension Politics* (2007), p. 883.

400 *The Handbook of Western European Pension Politics* (2007), p. 883.

401 Whitehouse E. (2007), p. 65.

402 *National Strategy Report on the Danish Pension System* (2005), p. 34.

403 It is also possible to pay a contribution covering health, maternity and unemployment insurance, in which case the contribution amount is doubled. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 82.

404 In 2005 the standard level amounted to DKK2,700 a year, which corresponded to 1% of the gross remuneration. The employee paid 1/3 of that amount, i.e. up to DKK900. Cf.: *National Strategy Report on the Danish Pension System* (2005), p. 34.

405 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 82.

accumulated in the institution managing the system – *Arbejdsmarkedets Tillćgspension* (ATP). The accumulated resources are invested in capital markets, however, not more than 70% may be invested in risk assets[406]. Pension amount depends on the value of the paid contributions and on the period of participation in the system[407]. Pensions are available to people who turned 65. It is also possible to delay retirement until reaching the age of 70[408]. This means increasing the pension amount by 7% for each year of later retirement[409]. The system allows for the so-called full benefit[410], which is paid to people working full-time. It is assumed that the maximum pension benefit in this system constitutes 20% of the amount of benefits paid from the public pension system[411]. The contributions and the pensions within this system are not indexed, however, the ATP guarantees the rate of growth of 2% a year[412].

**The public system of special complimentary pensions** (SP) makes the pension amount dependent on the amount of received remunerations. No minimum participation period is required for being entitled to pension. The contribution rate is fixed and equals 1% of the gross remuneration. Similarly to the ATP system, contributions are accumulated in the institution managing the system – *Arbejdsmarkedets Tillćgspension* (ATP), which invests the accumulated resources in capital markets[413]. After reaching the retirement age, pension benefits are paid for 10 years[414]. It is also possible to receive a single payment of the entire amount, if the amount of the accumulated contributions together with the investment gains does not exceed DKK15,000[415]. In the years between 2004 and

406 *The Handbook of Western European Pension Politics* (2007), p. 883.
407 Więckowska B. (2004), p. 76.
408 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 83.
409 *The Handbook of Western European Pension Politics* (2007), p. 884.
410 In 2003 it amounted to DKK21,444 a year.
411 In 2004 for a person aged 67 years the pension reached DKK22,400 a year. Cf.: *National Strategy Report on the Danish Pension System* (2005), p. 34.
412 *The Handbook of Western European Pension Politics* (2007), p. 884.
413 *The Handbook of Western European Pension Politics* (2007), p. 883.
414 Więckowska B. (2004), p. 77.
415 *The Handbook of Western European Pension Politics* (2007), p. 883.

2007 the payment of contributions in this system was suspended[416]. The contributions and the pensions within this system are not indexed, however, the ATP guarantees the rate of growth of 2% a year[417].

**The public system of complimentary pensions for people receiving anticipation benefits** (SAP) is a voluntary system designed for pensioners. Contributions in this system equal 2.8% of the pension amount[418], where 1/3 is paid by the pensioner, and 2/3 by the state[419]. The system may be administered by the ATP, or by a managing institution selected by the participant, i.e. a bank or a life insurance institution[420].

**The solution weakening the results of inflation** was introduced in the years between 1977 and 1979 by the government offering income tax reductions. After that period there were no other incomings to the system. The system is managed by an independent institution[421]. Resources accumulated in the system on individual accounts are transferred to the entitled people who turned 60 years old for 10 years. On 30 June 2007, there were 1.1 million participants in the system, and the market value of the accumulated assets reached DKK61.7 billion[422].

The second level concerns most of all **the company pension schemes**. These are the systems with defined contributions reaching from 7% to 10% of the remuneration in the private sector, and from 12% to 16% in the public sector[423], paid in 2/3 by the employer, and in 1/3 by the employee. The company pension schemes are a part of collective agreements between the employers and the employees. The system is fully capital, therefore pension amounts depend on the value of the paid contributions and the return on investment. A typical pension scheme in Denmark

416 *National Strategy Report on the Danish Pension System* (2005), p. 34.
417 *The Handbook of Western European Pension Politics* (2007), p. 884.
418 In 2005 the contribution amounted to DKK4,680 a year. Cf.: *National Strategy Report on the Danish Pension System* (2005), p. 34.
419 Więckowska B. (2004), p. 77.
420 *The Handbook of Western European Pension Politics* (2007), p. 883.
421 http://www.ld.dk/Default.aspx?ID=792, accessed 28 December 2007.
422 http://www.ld.dk/Half%20year%202007-1439.aspx, accessed 28 December 2007.
423 *National Strategy Report on the Danish Pension System* (2005), p. 35.

is then a defined contribution (DC) scheme[424]. The system covers 93% of those employed full-time[425]. 2/3 of the company pension schemes are managed by life insurance institutions, and the remaining part by banks and pension funds. The most popular company managing company pension schemes is *Pensionskassernes Administration A/S* (PKA), owned by 8 pension funds[426]. In March 2007 this company managed the assets of €15.5 billion[427].

The second level also covers **pensions for public sector workers**. What distinguishes them from the company pension schemes is the presence of a statutory legal basis for their functioning and the fact that they are repartition systems. They cover office workers of state administration, local government office workers[428], as well as pastors and priests. The condition for receiving pension benefits is a three-year participation in the scheme. The maximum period considered in pension calculation is 37 years of employment[429]. Pension amount depends on the number of years of work as a public officer and on the value of the last remuneration[430]. The maximum pension for a person who participated in the scheme for 37 years amounts to 57% of the last remuneration[431]. The system is managed by SAMPENSION – an institution established by *Kommunernes Pensionsforsikring* to manage pension resources. The institution managed the assets of DKK90 billion, submitted by 259,000 employees[432].

The third level of the Danish pension system consists in **individual pension schemes**. They are entirely voluntary and function similarly to the company pension schemes. The entities managing the accumulated

424 Andretti V. (2003), p. 203.
425 Green-Pedersen Ch. (2007), p. 467.
426 http://www.pka.dk/public/forside/this_is_pka/this_is_pka.htm, accessed 28 December 2007.
427 *PKA to double private equity exposure after initial success* (2007).
428 Więckowska B. (2004), p. 78.
429 *The Handbook of Western European Pension Politics* (2007), pp. 883 and 884.
430 *National Strategy Report on the Danish Pension System* (2005), p. 36.
431 *The Handbook of Western European Pension Politics* (2007), p. 884.
432 http://www.kp.dk/media(289,1030)/Engelsk_brochure.pdf, accessed 28 December 2007.

resources in those schemes are banks, life insurance institutions or pension funds. Pension benefits may be paid in four ways, as: 1) an immediate life annuity, 2) a postponed life annuity, 3) a single payment or 4) a dated postponed pension. The most popular company in this market is *Danica Pension* from the capital group *Den Danske Bank A/S*[433]. In March 2007 this company managed the assets of €32 billion[434].

### 2.6.4 Challenges and planned changes in the pension system in Denmark

The main problem of the Danish pension system consists in unfavourable demographic changes[435], however, the scale of this problem is much smaller than in other countries of the OECD[436]. The Danes were even able to lower the retirement age from 67 to 65 years in the middle of 2004. The changes that took place in 2004 concerned the following three areas[437]:

- causing gradual increase of importance of capital solutions at the expense of repartition solutions,
- reversing the tendency of early retirement,
- encouraging different forms of participation in additional pension schemes.

The decreasing level of the public debt and the budget surplus of the recent years have a great significance for the situation of the pension system in Denmark. This allows not only to finance the pension system from the budget, but also provides the pensioners with a catalogue of social and health care privileges. In this context it seems that the presently stable pension system will, even in its present form, be able to face the challenges concerned with unfavourable demographic changes. What is also quite favourable is a low unemployment rate and a high rate

433 http://www.danskebank.com/DanicaPensionInEnglish, accessed 28 December 2007.
434 *Danica to enter Irish market with Dublin HQ* (2007).
435 Więckowska B. (2004), p. 90.
436 Bingley P., Datta Gupta N., Pedersen P. J. (2004), p. 164.
437 Bingley P., Datta Gupta N., Pedersen P. J. (2004), p. 165.

of employment of older people. It is also worth emphasizing that the Danes are highly interested in saving money on pensions – at the end of 2005 they accumulated about DKK1.3 billion in pension funds, i.e. the equivalent of 85% of the GDP[438].

### 2.6.5 Summary

The pension system in Denmark is rooted in the British rules of Beveridge[439], where the pension is seen a social right of each resident of the country. The system is based on financing pensions from general taxes. Contributory solutions, characteristic of the Bismarck's model, are present only as a complimentary element of the base pension[440], but since they are realised within the capital formula, they are becoming more and more important. Thanks to the fact that the two base pillars are supported by the third one – the pillar of individual pensions – the solution adopted in Denmark is becoming more similar to the pension system model recommended by the World Bank[441].

An interesting solution in international comparisons is the functioning of the IT platform in the Danish pension system: *PensionInfo*, where pensioners may find information concerned with the functioning of the system and check the balance of their personal pension accounts[442].

438 Bernstein N. (2006).

439 Those rules were formulated by the British economist and social affairs reformer, William Henry Beveridge, who presented his opinions in 1942 in the so-called Beveridge Report titled *Social Insurance and Allied Services.* More on that subject is contained in the book by Jakub Wiśniewski: Wiśniewski J. (2005).

440 Bingley P., Datta Gupta N., Pedersen P. J. (2004), p. 155.

441 Green-Pedersen Ch. (2007), p. 454.

442 http://www.pensionsinfo.dk/, accessed 28 December 2007.

## 2.7 ESTONIA

### 2.7.1 General information about the country

The Republic of Estonia[443] (*Eesti Vabariik*) is a country situated in north-east Europe, on the Baltic sea, comprised of 15 counties (*maakonnad*) and 6 autonomous municipalities.

The official language is Estonian. The largest ethnic group were the Estonians (67.9% of the population). The largest national minority were the Russians (25.6% of the population). The majority of inhabitants (as many as 72.2%) declared not to be the followers of any religion. The largest religious groups were the Lutherans (13.6%) and the members of the Orthodox Church (12.8%). According to the Constitution of 1992, the head of the state is the President, and the government is led by the Prime Minister.

In 2004 the Republic of Estonia became a member of the NATO (29 March 2004) and the European Union (1 May 2004).

The currency in Estonia is the Estonian kroon (EEK[444], *Eesti kroon*).

The GDP *per capita* (PPP) was estimated in 2007 at US$20,300, with a growth rate of 11.4%, the public debt was 4.1% of the GDP; the current national balance at the end of 2007 showed the deficit of US$2.581 billion.

The unemployment rate was 4.5%.

In July 2007 the population of Estonia was 1,315,912 people[445] with the following age groups: 0-14 years of age – 15.0%, 15-64 years of age – 67.5%, 65 years of age and more – 17.5%. The overall life expectancy at birth was 72.30 years: 66.87 years for men, and 78.07 years for women.

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443 *Wielka Encyklopedia PWN* (2002), v. 8, pp. 346 and further.

444 According to ISO 4217 standard. On 31 December 2007 EUR1 was worth EEK15.6466. Cf.: http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-eek.en.html, accessed 21 January 2008.

445 https://www.cia.gov/library/publications/the-world-factbook/geos/en.html, accessed 21 January 2008.

### 2.7.2 Historic development of the pension system in Estonia

The pension system in Estonia dates back to 1922, when a law on family benefits was introduced[446], including also people in old age. In **1924** a pension system, an accident and health insurance were introduced[447]. The retirement age was set at 60 years for men and 55 years for women. The Soviet model, functioning in Estonia in later years, was based on Bismarckian solution distinguished by the fact that pensions were financed from general budget. The period of pension insurance entitling to pension benefits differed for men and women and was determined at 25 years for men and 20 years for women[448]. In 1990 pension benefits were financially isolated from central budget. A new law of 1990 introduced the term 'a social tax' reaching 33% of the gross remuneration, 20% of which was allocated on the pension system. Another regulation of 1991 separated Estonian pension system from the Soviet system. The new law made the pension amount dependent on the minimum salary and remunerations received in the past. In the same year the first law concerning the unemployed appeared[449]. In 1992 an additional element of a base amount was introduced for the calculation of pension amount. On 20 June 1992, the Soviet Ruble was replaced with the Estonian kroon at the rate of 10 rubles for 1 kroon. The kroon was linked with the German mark by the rate of EEK8 = DEM1. On 3 July 1992, a new Constitution was proclaimed, which introduced new elements to the bases of the pension system. It used the term 'share of state' in relation to the old age insurance instead of the previous 'right to pension'[450]. In 1993 the retirement age for men was still 60, and for women 55[451]. From 1994 the retirement age started to increase to reach the final level of 63

446 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 95.
447 *Social Security Programs Throughout the World: Europe, 2006* (2006), pp. 89 and 91.
448 Leppik L., Kruuda R. (2003), p. 61.
449 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 94.
450 Leppik L., Kruuda R. (2003), p. 63.
451 Leppik L., Kruuda R. (2003), p. 45.

for both sexes[452]. From 1 July 1994, pensions were no longer indexed in relation to the minimum remuneration. The basic reform of the pension system, which became effective at the beginning of 1999, took place in 1998. This is when the Social Insurance Board (*Sotsiaalkindlustusamet*), functioning within the Ministry for Social Affairs (*Sotsiaalministeerium*), was established. Pensions within the 1st pillar were still financed through social tax[453]. The social tax was paid to the Tax Office. Also in 1998 it became possible to voluntarily accumulate pension resources in pension funds – the 3rd pillar. On 1 April 1999, the first voluntary pension fund was registered in Estonia[454]. In 1999 the income from the social tax financed 70% of the spending on the base pension system. The remaining 24% of the spending came from general taxes, and 6% from local authorities budgets[455]. On the basis of the act of 9 May 2001 the Financial Supervision Authority (*Finantsinspektsioon*) was established as an agency of the Bank of Estonia (*Eesti Pank*)[456]. The Authority was appointed also to supervise pension funds. In 2001 the retirement age for women was 58, and for men 63[457]. The social tax amounted to the total of 33%, 20% of which was allocated on social insurance, and 13% on health insurance[458]. The average pension benefit in 2001 amounted to EEK1,583[459]. At the beginning of 2002 a principle of rewarding later retirement was introduced, according to which the pension was to be increased by 0.9% for each month of postponed retirement[460], and also the principle of pension indexation was established[461]. On 4 May 2002, all of the existing mandatory pension

452 The final retirement age for men was reached in 2001, whereas for women it is supposed to be reached in 2016. Cf.: Holzmann R., MacKellar L., Rutkowski M. (2003), p. 27.

453 Leppik L., Kruuda R. (2003), p. 65.

454 Afilied with capital group HANSA. Cf.: http://www.fi.ee/index.php?id=1788, accessed 14 April 2007.

455 Leppik L., Kruuda R. (2003), p. 23.

456 http://www.fi.ee/index.php?id=762, accessed 14 April 2007.

457 Leppik L., Kruuda R. (2003), p. 10.

458 Leppik L., Kruuda R. (2003), p. 22.

459 Leppik L., Kruuda R. (2003), p. 50.

460 Leppik L., Kruuda R. (2003), p. 55.

461 Leppik L., Kruuda R. (2003), p. 59.

funds in the Estonian market were registered[462], and on 1 July 2002 the 2nd pension pillar officially started its functioning as a supplement to the state pension insurance. The obligatory contribution was determined at 6% of the gross remuneration[463]. A person participating in the 2nd pillar paid 2% of the remuneration on that pillar, and his/her employer – 4%, where the social tax was also lowered by the 4%[464]. In 2004 the resources accumulated in the 1st pillar on individual accounts began to be recorded[465].

### 2.7.3 The present state of the pension system in Estonia

The pension system in Estonia comprises three pillars: 1) the base obligatory pension scheme operating within the pay-as-you-go principle and constituting the 1st pillar, 2) the complimentary pension scheme, voluntary for people born before 1983, and obligatory for those born after 1983, constituting the 2nd pillar, and 3) the complimentary voluntary pension scheme, constituting the 3rd pillar. The present state of the pension system in Estonia is presented in **Scheme no. 7**.

**Scheme no. 7**

**The present state of the pension system in Estonia**

| **1st pillar** | **2nd pillar** | **3rd pillar** |
|---|---|---|
| the base obligatory pension scheme operating within the pay-as-you-go principle | the complimentary pension scheme, voluntary for people born before 1983, and obligatory for those born after 1983 | the complimentary voluntary pension scheme |
| | supervised by the Financial Supervision Authority *Finantsinspektsioon* | |

Source: Own elaboration.

462 http://www.fi.ee/index.php?id=1787, accessed 14 April 2007.
463 Holzmann R. and Hinz R. et al. (2005), p. 152.
464 Leppik L., Kruuda R. (2003), p. 22.
465 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 89.

In **the base obligatory pension scheme** pension contribution of the hired workers equals 20% of the remuneration and takes the form of a social tax paid by the employer. The tax is allocated on pensions according to the rule of '16+4+2', which means that from the 20% social tax, 16% remains in the 1st pillar, and 4% is transferred to the 2nd pillar. Additionally the employee pays 2% of his or her gross remuneration to the 2nd pillar. In the case of the self-employed the contribution amounts to 20% of the declared income, however, only to the level of EEK12,276 a month[466]. People entitled to pension are those who paid their pension contributions for 15 years and reached the age of 63 in the case of men or 60 in the case of women[467]. It is possible to retire three years earlier (not more), which, however, results in the permanent reduction of pension benefits by 0.4% for each month of earlier retirement[468]. The period of employment may be prolonged without any set limits, which results in receiving a reward in the form of the increase in pension by 0.9% for each month of postponed retirement[469]. Certain professional groups – pilots, seamen, miners and some artists[470] – are entitled to receiving full pension after only 15-25 contributory years, irrespective of their age. Moreover, certain professional groups whose work is considered hard or dangerous may retire 5-10 years earlier if only they paid pension contributions of 15-25 years. This concerns the workers of chemical industry, cellulose-paper industry and metallurgists. Another category, including the parents of handicapped children, parents of three or more children and unlawfully imprisoned people, entitles those people to full pension, if only they paid their pension contributions for 15 years[471]. Pension benefit is composed of three summed up elements, depending on: 1) the fixed base amount, constituting the cohesive element of the system,

466 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 89.

467 Retirement age for women born in the following years is prolonged each year by 6 months in order to reach the level of 63 in 2016, i.e. the same age as in the case of men. This rule concerns women born in the years 1947-1953.

468 http://www.ensib.ee/frame_pensionid_eng.html, accessed 14 April 2007.

469 Leppik L., Kruuda R. (2003), p. 33.

470 Leppik L., Kruuda R. (2003), p. 33.

471 Leppik L., Kruuda R. (2003), p. 49.

2) the period of participation in the system until 31 December 1998, and 3) the component dependent on the amount of paid contributions after 1 January 1999. Since 1 April 2007, the fixed base amount has been equal to EEK1,123.58[472]. The period of participation in the system until 31 December 1998 is multiplied by the annual rate, i.e. since 1 April 2007 – EEK54.43[473]. However, within the third element, the sum of constitutive rates for particular years covered by the insurance after 1 January 1999 is multiplied by the value of the annual rate. The mathematical formula for calculating pension amount is as follows:

$$P = B + s \bullet V + I \bullet V,$$

where:
P – pension amount,
B – base amount,s – the number of contributory years until 31 December 1998,
I – the sum of annual rates for particular insurance years after 1 January 1999,
V – value of the annual rate[474].

The system allows for the functioning of the minimum pension[475], which must not be lower than the National Pension Amount[476], i.e. since 1 April 2007 – EEK1,423.31[477]. Each person aged 63, who has been living in Estonia for the last 5 years, is entitled to this amount[478]. Pensions are indexed according to the index that in 50% depends on the rate of growth of the income from social tax, and in 50% on the consumer price index[479].

472 Cf.: http://www.ensib.ee/toetused/vanaduspens2007_eng.html, accessed 14 April 2007. Starting from 2002 the base amount is changed every year on 1 April.
473 Cf.: http://www.ensib.ee/toetused/vanaduspens2007_eng.html, accessed 14 April 2007.
474 Leppik L., Kruuda R. (2003), p. 46.
475 The minimum pension at the level of the National Pension Amount was paid to only 1% of the pensioners. Cf.: *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 29.
476 In 2003 this amount was equal to EEK867. Cf.: Leppik L., Kruuda R. (2003), p. 33.
477 http://www.ensib.ee/frame_pensionid_eng.html, accessed 14 April 2007.
478 *2005 National Strategy Report on Adequate and Sustainable Pensions: Estonia* (2005), p. 8.
479 *2005 National Strategy Report on Adequate and Sustainable Pensions: Estonia* (2005), p. 9.

Pension income from the 1st pillar is taxed above the tax free amount[480].

**The complimentary pension scheme** is voluntary for people born before 1983, and obligatory for those born after 1983. The contribution amounts in total to 6% of the base, 2% of which is paid by the participant of the system, and 4% is provided by the state from the part of the social tax paid by the employer[481]. In the case of self-employed people the contribution amounts to 4% of the declared income plus operative costs[482]. The resources accumulated in this scheme are transferred to privately managed pension funds. At the moment, in the Estonian market there are six competing companies dealing with pension fund management, the capital of three of which is linked to the three largest banks in Estonia, the capital of two is linked to insurance institutions, and of the remaining one to an investment bank. The supervision of the activity of those funds is within the responsibility of the Financial Supervision Authority. Pension funds may function within three categories: 1) safe capital funds, allocating resources only in bonds, money markets instruments and bank deposits, 2) funds of capital at medium risk, allocating up to 25% of assets in shares, and 3) funds of capital at high risk, allocating up to 50% of assets in shares. Each of the managing bodies is obliged to offer a safe capital fund. Apart from the six safe capital funds present in the market, there are three funds of capital at medium risk, and six funds of capital at high risk – in total – fifteen pension funds[483]. Pension from the 2nd pillar is paid to people entitled to the pension from the 1st pillar. There is also a further obligation of a 5-year participation in the 2nd pillar, however, the first payment from the scheme will be realised in 2009[484]. Pension income from the 2nd pillar is taxed only above the tax free amount.

480 In 2003 it amounted to EEK36,000 a year.

481 Leppik L., Kruuda R. (2003), p. 43.

482 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 89.

483 Two funds are managed by the ERGO capital group, three by the HANSA group, three by the SAMPO group, five by the LHV group and two by the SEB group.

484 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 28.

**Complimentary voluntary pension scheme** may take two forms: 1) pension insurance policies, offered by life insurance institutions, or 2) pension fund participation units, managed by private managing companies[485]. Presently, there are 5 life insurance institutions in the market offering pension policies[486] and 7 voluntary pension funds[487]. The state encourages participation in this scheme by lowering the tax base by the value of contributions paid on the scheme up to 15% of the annual income. The minimum period of allocating resources in this scheme is set at 5 years. It is possible to receive pensions from this scheme as soon as after reaching the age of 55. Pensions paid from this scheme take the form of life annuities and are free of tax. Income from resources accumulated in the scheme is taxed at the fixed rate of 10%[488].

### 2.7.4 Challenges and planned changes in the pension system in Estonia

The most important challenge that the pension system in Estonia is facing is related to the demographic changes. Those changes are the result of two tendencies noticeable in Estonia in the recent years – negative population growth and external migrations[489]. As far as the population growth is concerned, we notice the decrease in the number of births, as well as the increase in life expectancy. Moreover, external migration balance in the recent years was negative. This is related to migration in two directions – of the Russians to Russia, as residential migration[490], and of Estonians to the countries of northern and western Europe, as labour

485 Leppik L., Kruuda R. (2003), p. 33.

486 One of each in capital groups: HANSA, SEB, ERGO, SAMPO and Seesam. Cf.: http://www.fi.ee/index.php?id=772, accessed 14 April 2007.

487 Three in the HANSA capital group, one in the LHV group, two in the SEB group and one in the SAMPO group. Cf.: http://www.fi.ee/index.php?id=1788, accessed 14 April 2007.

488 *2005 National Strategy Report on Adequate and Sustainable Pensions: Estonia* (2005), p. 10.

489 Leppik L., Kruuda R. (2003), p. 8.

490 Estonian authorities even introduced a kind of limit on the number of people leaving the country. Cf.: Leppik L., Kruuda R. (2003), p. 10.

migration, most commonly, with the intention of return[491]. It seems, however, that tax burdens are at a relatively high level – the individual income tax with the fixed rate of 22%[492], the social tax in the amount of 33%, 13% of which is allocated to health insurance[493], 20% to pension insurance[494], and 2% of the contribution goes to pension insurance in the 2nd pillar[495]. The element that has a positive influence on the condition of the pension insurance is a low unemployment rate and a high level of economic development. In the face of a balanced budget, stable situation of public finances and the reserves in the pension system, only extraordinarily intense accumulation of unfavourable demographic and economic factors could cause the future lack of stability in the Estonian pension system.

### 2.7.5 Summary

The pension system in Estonia provides for the people in older age, and according to the forecasts[496], it will be able to satisfy their needs also in the future. The implemented reforms within the functioning of the pension system place Estonia among the leaders in introducing changes aiming at binding their pension systems with capital markets. The adopted solutions are to a great extent similar to the solutions earlier adopted in Sweden and Poland, however, they also include quite original elements[497]. In the international evaluation, the transparency and modernity of the

491 In the period between 1995 and 1999, the negative migration balance systematically decreased from minus 8,200 people in 1995 to minus 600 people in 1999. Cf.: Leppik L., Kruuda R. (2003), p. 16.

492 The individual income tax rate is decreased every year until it reaches the level of 20% in 2009. For comparison, in Poland this tax amount is progressive and reaches, depending on the income, 19, 30 or 40%.

493 In Poland since 1 January 2007 – 9%.

494 In Poland, the pension insurance contribution equals 19.52%, including 7.3% paid to the 2nd pillar.

495 Whitehouse E. (2007), p. 137.

496 *2005 National Strategy Report on Adequate and Sustainable Pensions: Estonia* (2005), p. 17.

497 Read more about these discrepancies in the article by Lauri Leppik: Leppik L. (2005).

pension solutions in Estonia are very well-thought-of[498]. In order to point out interesting and innovative solutions in the Estonian reality described by the author, the above-mentioned modernity is worth emphasising. Full Internet accessibility to all of the elements of the pension system, including the pay-as-you-go system, is what distinguishes the Estonian system in international comparisons and sets new standards within the access of all the participants of the system to the information on the resources accumulated.

## 2.8 FINLAND

### 2.8.1 General information about the country

The Republic of Finland[499] (Finnish: *Suomen Tasavalta*, Swedish: *Republiken Finland*) is a country in northern Europe, situated on the Baltic Sea, comprising 6 provinces (*lääni*), including the autonomous Aland Islands.

The official languages of the country are Finnish and Swedish. The largest ethnic group were the Finns (93.4% of the population). The largest national minority were the Swedes (5.7% of the population). The largest religious group were the Lutherans of the Lutheran Church of Finland (84.2% of the population). The followers of the Orthodox Church constituted 1.1% of the population.

According to the Constitution of 2000, the head of the state is the President, and the government is led by the Prime Minister.

In 1995 Finland became a member of the European Communities and in 1999 entered the Economic and Monetary Union and replaced the Finnish mark with the euro[500].

498 In Estonia, the balance of the account within the base scheme, as well as in both complimentary schemes, is accessible for the participant via the Internet. Cf.: *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 31.

499 *Wielka Encyklopedia PWN* (2002), v. 9, pp. 129 and further.

500 Finnish marks (FIM) were converted into the euro (EUR) at the exchange rate of FIM5.94573 per EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 31 March 2008.

The current currency in Finland is the euro.

The GDP *per capita* (PPP) was estimated in 2007 at US$35,500, with a growth rate of 3.9%, the public debt was 32.9% of the GDP; the current national balance at the end of 2007 showed the surplus of US$17.12 billion.

The unemployment rate was 6.6%.

In July 2007 the population of Finland was 5,238,460 people[501] with the following age groups: 0-14 years of age – 16.9%, 15-64 years of age – 66.7%, 65 years of age and older – 16.4%. The overall life expectancy at birth was 78.66 years, 75.15 years for men, and 82.31 years for women.

### 2.8.2 Historic development of the pension system in Finland

The origins of the system of social care in Finland date back to the times of the Russian rule, when in 1895 an accident insurance was introduced[502]. In 1917 the first regulation on unemployment appeared[503]. The beginnings of the Finnish pension system date back to **1937**, when the first National Pension Act was passed[504]. The system introduced obligatory pension insurance for all the citizens who at the time of the implementation of the act were not yet 55 years old. On 16 December 1937, the Finnish Social Security Institution was set up (*Kansaneläkelaitos*, KELA)[505]. Pension funds started to be collected in 1939[506]. In 1948 the principles of accident insurance were modified[507] and family benefits were introduced[508]. The first pensions from the KELA were paid out in 1949, and only 14% of the citizens who had reached the retirement age

501 https://www.cia.gov/library/publications/the-world-factbook/geos/fi.html, accessed 31 March 2008.
502 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 102.
503 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 104.
504 Dietrich A. R. (2004), p. 93.
505 http://www.kela.fi/in/internet/english.nsf/NET/210102150531RH?OpenDocument, accessed 13 June 2007.
506 Lasilla J., Valkonen T. (2002), p. 263.
507 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 102.
508 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 105.

received them[509]. Pensions paid from that system constituted only 15% of the average remuneration[510]. In 1956 a new pension solution called national pension insurance was introduced[511]. The system was based on the principle of the civil right to help[512]. Pensions were available to all the people who turned 65 and lived in Finland for five years[513]. The year 1961 brought a new solution within complimentary pensions for the employees of the private sector (*työntekijäin eläkelaissa*, TEL), which started functioning on 1 July 1962[514]. In 1964 a pension system for local administration workers was introduced (*kunnallisten viranhaltijain ja työntekijäin eläkelakia*, KVTEL) and the institution managing that system was founded (*Kuntien eläkevakuutus*, KEVA), whereas in 1966 the system for state administration workers was established (*valtion perhe-eläkelain*, VEL)[515]. In 1969 a new scheme for family members of the deceased pensioners was introduced[516]. In 1974 separate systems for farmers (*Maatalousyrittäjien eläkelaitos*, MYEL) and for self-employed people (*yrittäjän eläkelain*, YEL)[517] were established. Also, separate systems were established for part-time employees (*lyhytaikaisissa työsuhteissa olevien työntekijäin eläkelaissa*, LEL), artists and other selected professional groups (*taiteilijoiden ja eräiden erityisryhmiin kuuluvien työntekijäin eläkelaissa*, TaEL), seamen (*merimieseläkelain*, MEL) and the clergy of the Lutheran Church (*Kirkkohallitus huolehtii evankelis-luterilaisen kirkon eläkelain*, KiEL)[518]. In 1984 a maternity insurance was introduced in Finland[519], and in 1988 the scope of the accident insurance was

509 Dietrich A. R. (2004), p. 94.
510 Kangas O. (2007), p. 265.
511 Dietrich A. R. (2004), p. 99.
512 Dietrich A. R. (2004), p. 94.
513 Kangas O. (2007), p. 265.
514 Dietrich A. R. (2004), p. 95.
515 Kangas O. (2007), p. 267.
516 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 97.
517 Kangas O. (2007), p. 266.
518 Leppik L. (2001).
519 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 101.

enhanced with occupational diseases[520]. The principle of paying pension contributions was introduced as late as 1991, and in 1992 the rules of pension payouts in the private and public sectors were harmonised[521]. In 1993 the retirement age was increased from 63 to 65, and in 1994 the age entitling to earlier retirement was increased from 55 to 58 years[522]. In 1995 the rule of adjusting the base pension amount to other income was introduced[523]. In 1996 the period of remunerations considered while calculating pension amounts was increased from 4 to 10 years[524]. In 1997 the overall spending on pensions constituted 12.6% of the GDP[525]. In 1999 the assets of the pension funds reached €67.0 million[526]. In 2000 the age entitling to earlier retirement was increased from 58 to 60 years[527]. In 2002 the rules concerned with the functioning of the system insuring against unemployment were modified[528]. In 2002 the amounts of pension contributions varied depending on the system: in the TEL (employees of the private sector) 21.52% of the remuneration, in the LEL (temporary employees) 21.8%, in the TaEL (artists) 17.3%, in the MEL (seamen) 20.0% of the remuneration, in the YEL (self-employed) 21.1% of the income, in the MYEL (farmers) 10.5% of the income, in the VaEL (civil servants) 23.5% of the remuneration, in the KuEL (local authorities workers) 27.0% of the remuneration, and in the KiEL (pastors) 31.4% of the income[529]. In 2002 the pension for a single person ranged from €467 to €488 depending on the commune inhabited by the pensioner[530]. Until the end of 2004, the administration of profession-related subsystems was decentralised and could be realised by insurance companies, company pension funds

520 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 102.
521 Kangas O. (2007), p. 275.
522 Lasilla J., Valkonen T. (2002), p. 275.
523 Kangas O. (2007), p. 276.
524 Lasilla J., Valkonen T. (2002), p. 275.
525 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 28.
526 Lasilla J., Valkonen T. (2002), p. 269.
527 Lasilla J., Valkonen T. (2002), p. 276.
528 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 102.
529 Dietrich A. R. (2004), p. 100.
530 Whitehouse E. (2007), p. 68.

or industrial pension funds[531]. In 2004 spending on the pension system reached €17.3 billion, i.e. 11.4% of the GDP and 42.6% of overall social spending[532]. The amount of the average pension in 2004 reached €1,377 a month[533]. In 2004 the subsystem of earnings-related pension insurance provided its beneficiaries with 84% of the value of the public pension benefits paid in Finland[534]. In the same year the system indicated a yearly surplus of the accumulated resources reaching 2.5% in relation to the GDP, and the market value of pension funds assets constituted 58.7% of the GDP[535]. In 2004 the national pension insurance subsystem provided for 16% of the public pensions paid in Finland[536]. At the same time, however, in that year only 8% of pensioners relied on the national pension insurance as their only benefit[537]. At the beginning of 2005 significant changes in the functioning of the subsystem of earnings-related pension insurance were implemented. This is when the Finnish Pension Centre was established (*Eläketurvakeskus*, TYOELAKE) for people covered by the new system of the TyEL (*työntekijän eläkelakia*) (which replaced the systems of the TEL, the LEL and the TaEL), and the pension systems for seamen (MEL), farmers (MYEL) and self-employed people (YEL). Separate systems for the employees of the public sector, local administration and for pastors were retained, governed by the Treasury, the Local Authorities Pension Office and the National Church Council respectively[538]. The reform of 2005 introduced the diversity and growing importance of remunerations received in particular years in relation to calculating pension amounts depending on age: 18-52 years old – 1.5%, 53-62 years old – 1.9% and 63-68 years old – 4.5% of the remuneration a year. Also, a flexible retirement age between 62 and 68 years was introduced. Moreover, what changed

531 Dietrich A. R. (2004), p. 98.
532 *Finland's National Pension Strategy Report 2005* (2005), p. 6.
533 *Finland's National Pension Strategy Report 2005* (2005), p. 10.
534 *Finland's National Pension Strategy Report 2005* (2005), p. 7.
535 *Finland's National Pension Strategy Report 2005* (2005), p. 8.
536 *Finland's National Pension Strategy Report 2005* (2005), p. 7.
537 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 113.
538 Dietrich A. R. (2004), p. 99.

was the fact that pension amount was no longer subject to the value of remunerations received within 10 years but to the remunerations from the entire working time, and the average lifespan index was used while calculating pension amounts[539]. Furthermore, the new solution imposed an obligation on employers to finance national pension insurance, and the first health insurance appeared in Finland[540]. From 1 January 2006 certain changes were introduced to the functioning of the pension system for local administration workers, and its name was changed from the KVTEL to the KuEL (*Kunnalliseen eläkelakiin*)[541]. At the beginning of 2007, the rules of the functioning of the system for state administration workers were changed, and its name was changed from the VEL into the VaEL (*Valtion eläketurvassa*)[542]. The new TyEL system fully covered former participants of the systems TEL, LEL and TaEL[543]. Furthermore, special payment cards for pensioners and a pension electronic platform were introduced[544].

### 2.8.3 The present state of the pension system in Finland

Presently the pension system in Finland consists of three elements: 1) the obligatory state pension system (the 1st level), 2) the voluntary company system (the 2nd level), and 3) the voluntary individual system (the 3rd level)[545]. The present state of the pension system in Finland is presented in **Scheme no. 8**.

539 http://www.tela.fi/, accessed 2 July 2007.
540 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 101.
541 http://www.keva.fi/Table_pict/cid2/Info_txt/id4675/elakeopap.pdf, accessed 12 June 2007.
542 http://www.vael.fi/Public/default.aspx?nodeid=17023&culture=fi-FI&contentlan=1, accessed 12 June 2007.
543 http://tyoelakelakipalvelu.etk.fi/fi/tiedote/index.php?asiakirjanumero=5837, accessed 12 June 2007.
544 http://www.tyoelake.fi/, accessed 3 July 2007.
545 Dietrich A. R. (2004), p. 96.

**Scheme no. 8**

**The present state of the pension system in Finland**

<table>
<tr><td>3rd level</td><td>the individual pension schemes</td></tr>
</table>

<table>
<tr><td>2nd level</td><td>the voluntary company schemes</td></tr>
</table>

<table>
<tr><td rowspan="7">1st level</td><td rowspan="7">the national pension insurance</td><td rowspan="7">managed by the Finnish Instituteof Social Security Kansaneläkelaitos, KELA</td><td rowspan="7">the earnings-related pension insurance*</td><td>the clergy of the Lutheran Church Kirkkohallitus huolehtii evankelis-luterilaisen kirkon eläkelain, KiEL</td><td>managed by the National Church Council Suomen Evankelis-Luterilaninen Kirkko Keskushallinto</td></tr>
<tr><td>local administration workers Kunnalliseen eläkelakiin, KuEL</td><td>managed by the Local Authorities Pension Office Kuntien eläkevakuutus</td></tr>
<tr><td>civil servants Valtion eläketurvassa, VaEL</td><td>managed by the Treasury Valtion eläkelaki</td></tr>
<tr><td colspan="2">self-employed people Yrittäjän eläkelain, YEL</td></tr>
<tr><td colspan="2">farmers Maatalousyrittäjien eläkelaitos, MYEL</td></tr>
<tr><td>seamen Merimieseläkelain, MEL</td><td>managed by the Mariner Pension Fund</td></tr>
<tr><td colspan="2">private sector workers Työntekijän eläkelakia, TyEL</td></tr>
</table>

* The earnings-related pension insurance in Finland are ranked among the 1st pension pillar, but in the EU they ranked among the 2nd pension pillar. Cf.: Kangas O., 2007, p. 270.
Source: Own elaboration.

**The obligatory state pension system** (the 1st level) includes: a) the national pension insurance and b) the earnings-related pension insurance.

**The national pension insurance** guarantees to all the Finnish citizens living in Finland the right to the national base pension on condition that they lived in Finland for at least 3 years after turning 16. The right to such a pension is also granted to the citizens of other countries within the European Economic Area and Switzerland, on condition that they lived in Finland continuously for 5 years. Young people who became disabled before reaching the age of 21 and while living in Finland are entitled to such a pension irrespective of the time spent in Finland[546]. This system is nearly entirely financed from budget resources. Only the employers submit to the system from 0.898% to 3.998% of the remunerations they pay, depending on the owned capital, whereas communal authorities and the government submit 1.948% of the remunerations paid to their employees[547]. The retirement age equals 65. Earlier retirement is possible between the age of 62 and 64 in the case of people with lowered working capacity. The amount of the national pension depends on the pension amount received from the earnings-related pension insurance. People entitled to full national pension are those who lived in Finland for 40 years, between the age of 16 and 65. National pension constitutes 21% of the average remuneration in the place of residence[548]. The system is managed by the Finnish Institute of Social Security, i.e. the KELA, supervised by the Finnish Parliament[549]. National pension insurance is indexed once a year, in accordance with the changes in the consumer price index[550]. The income from the national pension insurance is taxed with consideration of the reduction for pension benefits[551].

**The subsystem of earnings-related pension insurance** concerns the workers of the public and private sector, as well as the self-employed. All of these people are covered by the insurance related to employment and are entitled to benefits from that system. The subsystem includes the following separate pension schemes: the TyEL, the MEL, the MYEL, the

546 http://www.kela.fi/in/internet/english.nsf/NET/100702121508MH?openDocument, accessed 12 June 2007.
547 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 97.
548 In 2005 it reached on average €495. Cf.: *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 113.
549 Lasilla J., Valkonen T. (2002), p. 268.
550 *Finland's National Pension Strategy Report 2005* (2005), p. 14.
551 http://www.kela.fi/in/internet/english.nsf/NET/110702101134MH?openDocument, accessed 18 June 2007.

YEL, the VaEL, the KuEL and the KiEL. The retirement age is left to the decision of the future pensioner and ranges from 63 to 68. Pension amount depends on the value of remunerations and the time of employment. The amount is based on the remunerations received during the whole period of employment since a given person turned 18. It is possible to retire earlier, as soon as at the age of 58, if a given person is employed part-time[552]. The subsystem is financed from contributions, the value of which is determined annually. A part of the contribution is allocated on the payment of current pensions (repartition part), and a part on the fund for future payments (capital part)[553]. Contribution amounts are different in different systems. In the TyEL (private sector workers) in 2007 the contribution paid by the employers for the permanently employed reached 21.6% of the remuneration without the temporary reduction, 21.1% with the temporary reduction[554], and 22.04% of the remuneration in the case of people working part-time. Additionally, the worker under 53 years old pays 4.6% of the remuneration, while over 53 years old – 5.8% of the remuneration[555]. In the MEL (seamen) the contribution paid by the employers amounts to 22.0% of the remuneration, and in the YEL (self-employed people) it depends on the participant's age – 20.8% of the income for those below 53 years old, and 21.9% of the income for those over 53 years old. Moreover, in the YEL there is a determined maximal income subject to contribution payments[556]. Self-employed people are also entitled to a 25% contribution reduction in the period of the first 48 months of managing a business entity they have started for the first time. In the MYEL (farmers) the contribution depends on the income and varies from 10.19% to 20.8% in the case of people under 53 years old, and from

552 http://www.kela.fi/in/internet/english.nsf/NET/100702123749MH?openDocument, accessed 12 June 2007.
553 Dietrich A. R. (2004), p. 99.
554 Temporary reduction applies to people with an overpayment of contributions in 2005.
555 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 97.
556 In 2006 this amounted to €94,391.37 a year. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 97.

10.73% to 21.9% in the case of people over 53 years old, while the average contribution paid within the MYEL equals 10.7%. The Treasury finances 9.1% of the spending of the YEL and 78% of the spending of the MYEL[557]. The MEL is managed by the Mariner Pension Fund. Contributions also vary in systems concerning the workers of public institutions. In the KuEL (local administration workers) the base contribution is paid by the employer and reaches 16.5%, and the additional contribution paid by the employee depends on his or her age – under 53 years old it reaches 4.3% of the remuneration, and over 53 years old – 5.4% of the remuneration. In the VaEL (state administration workers) the contribution paid by the employer typically equals 23.64% of the remuneration, however, for people whose retirement age is determined at 55, 58 or 60 years old, the employer pays the contribution amounting to 31.41% of the remuneration, and for military officers 35.28% of the remuneration. Additional contribution paid by the employee depends on his or her age – under 53 years old it reaches 4.3% of the remuneration, and over 53 years old – 5.4% of the remuneration. Within the Vel system 60% of the spending is financed from state budget. In the KiEL (pastors) the contribution varies from 26.37% to 26.95% of the remuneration depending on the size of parish[558]. System KuEL is managed by the Local Authorities Pension Office (*Kuntien eläkevakuutus*)[559], the VaEL by the Treasury (*Valtion eläkelaki*)[560], and the KiEL by the National Church Council (*Suomen Evankelis-Luterilaninen Kirkko Keskushallinto*)[561]. The right to full pension benefit from employment is granted after 40 years of employment or self-employment. The full pension constitutes 60% of the received salary. Retiring at the age of 62 or older means lowering the pension amount by 0.4% for each month before turning 65, whereas postponed retirement means receiving a reward in the form of a pension increase by 0.6% for each month after turning 65[562]. Earnings-related pensions are

557 http://www.etk.fi/Binary.aspx?Section=41899&Item=58211, accessed 18 June 2007.
558 http://www.etk.fi/Binary.aspx?Section=41899&Item=58212, accessed 18 June 2007.
559 Cf.: http://www.keva.fi, accessed 18 June 2007.
560 Cf.: http://www.vel.fi, accessed 18 June 2007.
561 Cf.: http://www.evl.fi/keskushallinto/, accessed 18 June 2007.
562 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 99.

indexed once a year, according to the changes in the salary growth – in 20%, and the consumer price index – in 80%. The income from earnings-related pension insurance is taxed with the consideration of tax reduction for pension benefits[563].

**The voluntary company system** functions in the form of pension funds, special foundations or life insurance institutions[564]. The employer may establish an independent pension fund if the collective pension insurance has at least 300 participants, whereas if the number of participants exceeds 30 people, it is possible to open a special foundation. The contribution paid by the employer reaches about 2% of the remuneration, and the contribution paid by the employee – less than 0.5% of the remuneration[565]. Pension contribution is deducted from the taxed income, however, pension payments are taxed[566]. The subsystem covers about 15% of the employed.

**The voluntary individual system** is realised through accumulating pension resources in a selected life insurance institution. The average contribution in this system reaches 3% of the remuneration[567]. Pensions may be paid after reaching the age of 62. The amount of the taxable capital gains is lowered by the amount of contributions paid to the system, however, the pensions are taxed[568]. The number of participants in this subsystem reaches about 7% of the employed.

### 2.8.4 Challenges and planned changes in the pension system in Finland

The most important challenge that the pension system in Finland is facing seems to be the demographic problem, as well as the economic

563 *Finland's National Pension Strategy Report 2005* (2005), p. 13.
564 Dietrich A. R. (2004), p. 101.
565 *Finland's National Pension Strategy Report 2005* (2005), p. 21.
566 In 2005 at 28%. Cf.: *Finland's National Pension Strategy Report 2005* (2005), p. 14.
567 *Finland's National Pension Strategy Report 2005* (2005), p. 21.
568 *Finland's National Pension Strategy Report 2005* (2005), p. 14.

situation of the country. Ageing of the society and earlier retirement (especially of the unemployed) significantly increase the strains on the pension system[569]. It is estimated that in 2030 spending on the pension system will increase to 15% of the GDP[570], and the participation of people over the age of 65 will increase to 26%[571] of the population. With the current system of financing the pensions, it is expected that the contribution amounts will increase even to 27% in 2030[572]. The actual average retirement age in 2004 was only 59.1 years[573]. This means that the necessity of postponed retirement should be emphasised[574]. It is expected that the share of national pension insurance in the pensioners' income should decrease, and at the same time the share of earnings-related pension insurance should increase. As a result, it is possible that the strains on the budget will decrease from 3% of the GDP in 2004 to 2.5% of the GDP in 2050[575]. Also, there might be a tendency for developing capital systems, both collective and individual.

### 2.8.5 Summary

The pension system in Finland indicates high disintegration in the subsystems for particular professional groups. The reform of 2005 only partially eliminated this problem. The diverse rules concerning the collection of contributions, retirement age and the payment of pension benefits are not conducive to reaching system clarity. The adopted system solution related to the national pension insurance is based on the British rules of Beveridge, seeing the pension benefit as a social right of each citizen of the country. This system is based on financing

569 *Finland's National Pension Strategy Report 2005* (2005), p. 5.

570 *Finland's National Pension Strategy Report 2005* (2005), p. 26.

571 Dietrich A. R. (2004), p. 110.

572 *Finland's National Pension Strategy Report 2005* (2005), p. 31.

573 *Finland's National Pension Strategy Report 2005* (2005), p. 25.

574 In 2001 86% of Finnish pensioners retired before reaching the age of 65. In 2004 this number reached 83%. Cf.: *Finland's National Pension Strategy Report 2005* (2005), pp. 23-24.

575 *Finland's National Pension Strategy Report 2005* (2005), p. 26.

pensions from general taxes. However, contributory solutions that make pension amounts dependent on earnings, which is characteristic of the Bismarck's model, are also present in many additional subsystems that seem to be gaining importance in Finland. Those solutions, however, are most commonly based on the pay-as-you-go principle. Systems related to capital markets have so far been taking the marginal position in Finland. A solution that distinguishes the pension system in Finland from the systems in other countries is the functioning of special pension payment cards.

## 2.9 FRANCE

### 2.9.1 General information about the country

The French Republic[576] (*République française*) is a country located in Western Europe, on the Atlantic Ocean and the Mediterranean Sea. It consists of 22 regions[577] (*régions*), which embrace 96 departments (*départements*). Additionally, the country contains 4 overseas departments (*départements d'outre-mer*) – French Guiana, Guadeloupe, Martinique and Reunion, 4 overseas collectivities (*collectivités d'outre-mer*) – French Polynesia, Saint Pierre and Miquelon, Wallis and Futuna, and Mayotte, 1 overseas territory (*territoire d'outre-mer)* – French Southern and Antarctic Lands, two overseas collectivities (*collectivité d'outre-mer)* – Saint Martin and Saint Barthélemy and one *sui generis* collectivity (*pays d'outre-mer*) – New Caledonia.

The official language is French. The largest ethnic group were the French, who made up 94% of population. It is estimated that 90% of the French were born in France but at least the great-grandparents of 30% were born outside metropolitan territory, especially in northern and western Africa or Indochina. The largest denomination was the Roman Catholic Church, whose adherents constituted 83-88%. The adherents of Islam amounted to 5-10% of the population.

576 *Wielka Encyklopedia PWN* (2002), v. 9, pp. 314 and further.
577 Including Corsica enjoying the so-called *status specifique.*

According to the Constitution of 1958, the President is the head of state and the Prime Minister is the head of government.

In 1949 France joined the NATO, and in 1957 signed the Treaty of Rome, which established the European Atomic Energy Community (EURATOM) and the European Economic Community. In 1999 France joined the Economic and Monetary Union and replaced the French franc with the euro[578].

The current currency of France is the euro.

The GDP *per capita* (PPP) was estimated at US$33,800 in 2007, the GDP growth at 1.8%, and the public debt was 66.6% of the GDP; current account deficit was equal to US$35.94 billion in 2007.

The unemployment rate was 8.0%.

In July 2007 France had a population of 63,718,187[579] with the following age structure: 0-14 years of age – 18.6%, 15-64 years of age – 65.2%, 65 years of age and over – 16.2%. Life expectancy at birth for total population was 80.59 years, for men – 77.35 years and for women – 84.00 years.

### 2.9.2 Historic development of the pension system in France

The beginnings of the French pension system date back to 1790, when the pension system for civil servants was established[580]. In 1898 the first law concerning accident insurance was introduced[581] and in 1905 the first unemployment law was implemented[582]. In **1910** the first pension system based on collecting contributions was established. It was defined as a pension system for workers and farmers (*retraites ouvriéres et*

578 French francs (FRF) were converted into the euro (EUR) at the exchange rate of FRF6.55957 per EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 31 March 2008.

579 https://www.cia.gov/library/publications/the-world-factbook/geos/fr.html, accessed 31 March 2008.

580 da Conceição-Heldt E. (2007), p. 167.

581 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 111.

582 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 112.

*paysannes*)[583]. In 1928 the first health insurance law was introduced. It also covered the people at the retirement age[584]. In 1932 the law concerning family allowances was implemented[585]. On 1 January 1938, the French National Railway Company (*Société nationale des chemins de fer français*, SNCF), which offered its own pension scheme, was founded[586]. In 1945 the thorough reform of the French pension system took place. Its aim was to create a common solution, which would cover the whole country, which would be based on regional pension funds but coordinated by a national pension fund[587]. The system implemented at that point was named an unfunded contributory pension system (*systéme de retraite par répartition*)[588]. The retirement age was 65 and those who retired at that point received a pension benefit equal to 40% of their remunerations. However, it was possible to retire early, at the age of 60. A person who took advantage of early retirement received a pension benefit equal to 20% of the earnings[589]. In 1945 the reform of health insurance was also carried out[590]. In 1946 the state pension system for the self-employed was formed (Rubel wrote that the system applied to non-workers and non-farmers)[591]. In 1946 the changes were also introduced into accident insurance[592] and family allowances[593]. In 1947 the system of auxiliary pensions for people in managerial positions in the private sector was founded. It was administered by the General Association of Executive Pension Institutions (*Association Générale des Institutions de Retraite des Cadres*, AGIRC)[594]. In 1948 the separate pension schemes for craftsmen,

583 da Conceição-Heldt E. (2007), p. 166.
584 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 108.
585 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 114.
586 http://fr.wikipedia.org/wiki/Soci%C3%A9t%C3%A9_nationale_des_chemins_de_fer_fran%C3%A7ais, accessed 31 January 2008.
587 Rubel K. (2004b), p. 115.
588 da Conceição-Heldt E. (2007), p. 166.
589 da Conceição-Heldt E. (2007), pp. 166-167.
590 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 108.
591 Rubel K. (2004b), p. 119.
592 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 111.
593 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 114.
594 Blanchet D. and Legros F. (2002), p. 111.

traders and freelancers[595], including *Caisse Autonome de Retraite des Medecins de France* (CARMF)[596], were introduced. In 1949 the Scheme for Non-Titular Employees of Public Sector (*l'Ipacte pour les cadres non titulaires du secteur public*, IPACTE) was implemented. In 1956 the Retirement Solidarity Fund (*Fonds de solidarité vieillesse*)[597] was formed and the minimum pension regulated by acts of Parliament was introduced[598]. In 1958 the unemployment law was revised[599]. In 1960 the IPACTE was converted into the IGRANTE (*l'Igrante pour les non cadres non titulaires du secteur public*). In 1961 the auxiliary system for workers of private sector was established. It was managed by the Association of Supplementary Pension Schemes (*Association pour le régime de Retraite Complémentaire des salaries*, ARRCO)[600]. In 1967 the National Retirement Pension Fund for Employees (*Caisse nationale de l'assurance vieillesse des travailleurs salariés*, CNAVTS) was set up. In the state sector there were four separate pension schemes: 1) for civil servants, 2) for the employees of local government administration (CNRACL), 3) for railway workers (SNCF), and 4) for the employees of energy and gas industry (*Électricité de France – Gaz de France*, EDG-GDF). There were also five separate pension schemes for the self-employed: 1) farmers (managed by the Agricultural Social Mutual Fund *Mutualité sociale agricole*, MSA), 2) for manufacturers and traders (managed by the Mutual Insurance Fund *de l'Organisation autonome nationale de l'industrie et du commerce*, ORGANIC), 3) for artists (*Caisse Nationale d'Assurance Vieillesse des Artisans*, CANCAVA), 4) for health care employees (CARMF), 5) for other self-employed people (*Caisse Nationale d'Assurance Vieillesse des Professions Libérales*, CNAVPL)[601], including a) craftsmen (managed by the mutual insurance association *Assurances Vieillesse des Artisans*, AVA),

595 Rubel K. (2004b), p. 115.
596 http://www.carmf.fr/cdrom/web_CARMF/carm/carmf.htm, accessed 31 January 2008.
597 da Conceição-Heldt E. (2007), p. 167.
598 Rubel K. (2004b), p. 116.
599 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 112.
600 Rubel K. (2004b), p. 118.
601 Blanchet D. and Legros F. (2002), p. 112.

b) barristers (*Caisse national des barreaux française*, CNBF), and c) freelancers (*Caisse nationale de l'assurance*, CNA). In 1970 the IGRANTE was converted into the Complementary Pension Fund for Non-titular Civil and Public Servants (*Institution de retraite complémentaire des agents non titulaires de l'etat et des collectives*, IRCANTEC)[602]. In 1972 the auxiliary tier of the common pension system became mandatory[603] and accident insurance started applying to farmers[604]. In 1980 expenditures on pensions amounted to 9.5% of the GDP[605]. In 1982 the retiremetn age was decreased to 60 years[606]. The publication of *Livre Blanc sur les Retraites,* i.e. *The White Paper on Pensions*, started a national discussion on the future of pension system in France[607]. In 1991 a new fixed tax (*contribution sociale généralisée*, CSG), whose aim was to finance pensions, was introduced. It was equal to 1.1% of any income, including pensions[608]. The discussion, inspired by *The White Paper on Pensions*, gave birth to Balladur's reform of 1993, according to which 1) the previous pension indexation based on an average remuneration replaced the pension indexation with consumer prices, 2) gradual changes were introduced into the method of pension calculation, which took into account the remuneration within the period of last 25 years instead of last 10 years[609], 3) the required contribution period was gradually raised from 37.5 to 40 years[610] and 4) the Retirement Solidarity Fund (*Fonds de solidarité vieillesse*, FSV) was established. It was financed through the CSG tax, which was raised from 1.3% to 2.4%, and through taxes levied on drinks

602 http://www.ircantec.fr/default.asp?chap=1&ref=1&sub=1&mode=present/evolregime.htm, accessed 31 January 2008.
603 Mahieu R., Blanchet D. (2004), p. 237.
604 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 111.
605 Schludi M. (2005), p. 193.
606 Blanchet D. and Legros F. (2002), p. 111.
607 Blanchet D. and Legros F. (2002), p. 110.
608 Schludi M., (2005), p. 260.
609 The beginning of changes took place in 1994 and the final period of 25 years is to be reached in 2008.
610 The changes began in 1994 and the required contribution period was raised by one contribution per a quarter until 2003.

(including all alcoholic and some non-alcoholic drinks)[611]. In July 1993 French banks started to offer the opening of saving pension funds *fonds d'épargne retraite*[612]. In 1993 the level of a contribution within the ARRCO system was increased from 4% to 6% of remuneration[613]. In 1997 the Thomas's Law (*Loi Thomas*) introduced the opportunity to take advantage of voluntary pension funds. It was abolished in 1998, when the rules were taken over by the Left. In 1998 the Pension Reserve Fund (*Fonds de reserve des retraites*, FRR) was established[614]. Although it was managed by the state, it invested free assets of the public system on capital markets[615]. In 1999 a very pessimistic report, Charpin's Report, was published. It did not contain any recommendations of changes but only potential development plans of the pension system until 2040. The main conclusion of the report was the necessity to increase the retirement age to 65[616]. In 2000 the Pensions Advisory Council (*Conseil d'orientation des retraites*) was founded[617]. According to the statistics of 1 July 2000, the following pension schemes had the highest number of members: the general scheme *Régime général* (67.23% of those insured), the scheme for civil and military servants *Fonctionnaires civils et militaires* (10.50%), and the scheme for local communities *Collectivités locales* (7.08%)[618]. In 2001 the employees' pension schemes were introduced[619]. In 2002 the minimum pension was equal to €525 a month[620], the maximum pension amounted to €14,112 a year[621], and the expenditures on pensions accounted for 12% of the GDP[622]. In 2003 the contribution period required for the pension reached

611 Schludi M. (2005), p. 195.
612 Palier B. (2005), p. 105.
613 Schludi M. (2005), p. 204.
614 Blanchet D. and Legros F. (2002), pp. 118 and 120.
615 Schludi M. (2005), p. 261.
616 Blanchet D. and Legros F. (2002), p. 121.
617 http://www.cor-retraites.fr/article62.html, accessed 31 January 2008.
618 http://www.cnav.fr/5etude/statistiques/cotisants.htm, accessed 31 January 2008.
619 Blanchet D. and Legros F. (2002), p. 125.
620 Whitehouse E. (2007), p. 71.
621 da Conceição-Heldt E. (2007), p. 171.
622 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 29.

the intended level of 160 quarters, predicted in the reform of 1993[623]. In 2003 another reform of the French pension system took place. It introduced the chance of 'buying out' the missing quarters required for the contribution period, it gave privileges to economically active people at the retirement age, it established the common pension information system for all pension schemes and it implemented individual pension savings funds (*plan d'épargne individuelle pour la retraite*, PEIR), which constituted a part of the 3rd pillar[624]. Since 1 January 2004, it has been possible to combine earned income and pension benefits provided the incomes come from two separate schemes[625]. Since 2004 there has been an opportunity to save assets for a pension in the form of company or departmental pension schemes: the PERP (*Plan d'Épargne Retraite Populaire*) and the PERCO (*Plan d'épargne pour la retraite collectif*)[626]. In 2005 the pension contribution in the primary layer of pension system was equal to 14.6%, out of which the employer paid 8.2% and the employee paid 6.4%[627].

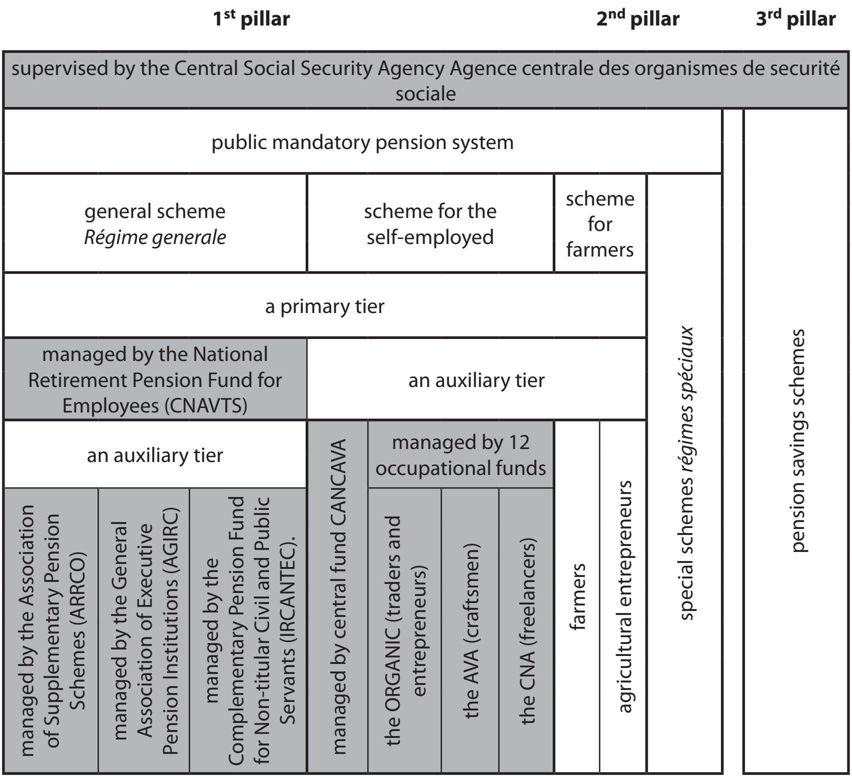
### 2.9.3 The present state of the pension system in France

The French pension system consists of: 1) public mandatory pension system, which embraces the parts of the 1st and 2nd pillar, 2) voluntary pension savings schemes, which constitute the 3rd pillar. The system is supervised by the Central Social Security Agency (*Agence centrale des organismes de securité sociale*)[628]. The present state of the pension system in France is presented in **Scheme no. 9**.

623 Mahieu R., Blanchet D. (2004), pp. 235-236.
624 Rubel K. (2004b), p. 116.
625 Rubel K. (2004b), p. 127.
626 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 44.
627 Schludi M. (2005), p. 191.
628 da Conceição-Heldt E. (2007), p. 169.

**Scheme no. 9**

**The present state of the pension system in France**




Source: Own elaboration.

**Public pension system** embraces a few hundred pension schemes, which can be divided into four basic categories: a) general scheme (*Régime generale*), b) special schemes (*régimes spéciaux*), c) scheme for the self-employed, and d) scheme for farmers. The public pension system covers 98% of pension spending and is financed through pension contributions and taxes[629].

[629] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 44.

**The general scheme**, which is of unfunded character, consists of two tiers: a primary tier managed by the National Retirement Pension Fund for Employees (CNAVTS), and of an auxiliary tier, which is managed by three separate institutions: the Association of Supplemntary Pension Schemes (ARRCO), the General Association of Executive Pension Institutions (AGIRC), and the Complementary Pension Fund for Non-titular Civil and Public Servants (IRCANTEC). The primary fund is common for all insured people. It is based on a defined benefit (DB) rule and may be perceived as the 1st pillar in France. The primary tier contribution amounts to 14.95%-32.70% of remunerations, out of which the employer pays from 8.30% to 16.35%, and the employee pays from 6.65% to 16.35%[630]. The level of contribution may not be higher than the gross remuneration equal to €2,589[631]. The contributions paid are converted into pension points. A person has the right to the full pension if he or she is over 60 and provided the insurance period has not been shorter than 160 quarters, i.e. 40 years[632]. The level of the benefit is calculated according to the following formula[633]:

$$P = F \bullet R \bullet C/160$$

where:
P – annual pension benefits,
F – percent rate, which fluctuates from 25% (for people aged 60) to 50% (for people aged 65),
R – an average gross remuneration,
C – the contribution period expressed in quarters,160 – the number of quarters.

Postponed retirement means the increase in the rate by 0.75% for each quarter, up to 15%. Each missing quarter, required to reach the

630 da Conceição-Heldt E. (2007), p. 171.
631 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 106.
632 Rubel K. (2004b), p. 122.
633 Rubel K. (2004b), p. 123.

number of 160 quarters, means the decrease in the level of pension by 1.25%[634]. It is possible to buy out missing quarters for the period of studies or for the employment period of low income before a certain person retires[635]. In 2008 average gross remuneration was calculated based on 25 years of employment[636]. The full base pension is equal to 50% of average remuneration of an insured person[637]. Pensions are subject to an income tax according to general rules. Additionally, the pensioners pay the CSG tax equal to 6%[638]. The auxiliary tier is mandatory within the ARRCO for all hired workers, who are obliged to join the general primary scheme, within the AGIRC for engineers and management personnel, and within the IRCANTEC for civil and public servants who are not subject to special schemes[639]. The assets gathered in auxiliary funds are administered by institutions supervised by the so- called social partners, and are invested on capital markets[640]. They may be perceived as the part of the 2nd pension pillar[641]. The ARRCO covers 43 pension schemes[642]. In the ARRCO the pension contribution amounts to from 6.0% to 7.5% of earnings[643]. There are 67 pension schemes in the AGIRC[644]. The pension contribution in the AGIRC is equal to 16.0%-20.0% of remuneration[645]. In the IRCANTEC

634 Dupuis J.-M., El Moudden C. (2004), p. 197.
635 Rubel K. (2004b), p. 124.
636 In 2008 the period taken into account while calculating the pension has been raised to 25 years.
637 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 107.
638 Whitehouse E. (2007), p. 72.
639 Rubel K. (2004b), pp. 117-118.
640 Palier B. (2005), p. 95.
641 In literature, there are two terms used to define the 1st pillar: the primary tier as well as the auxiliary tier. However, according to the classification of the World Bank of 1994, it seems that the auxiliary tier may be perceived as the part of the 2nd pillar. Such a classification may be supported by the fact that that tier is connected with employers and the investment of the assets on capital markets. A similar conclusion may be drawn from the classification in the latest thesis by da Conceição-Heldt. Cf.: da Conceição-Heldt E. (2007), pp. 168 and 170.
642 da Conceição-Heldt E. (2007), p. 168.
643 da Conceição-Heldt E. (2007), p. 171.
644 da Conceição-Heldt E. (2007), p. 168.
645 da Conceição-Heldt E. (2007), p. 171.

the pension contribution accounts for 4.5%-17.5%[646]. The full auxiliary pension is equal to 20% of the insured person's remuneration[647]. Within the general scheme, there is a minimum pension[648].

**Special schemes** were formed for workers of mining industry, railway system, gas industry, energy industry, merchant navy, opera house, Comédie-Française, hospitals, Paris Metro, Bank of France, and for notaries, military servants, local authorities, local government employees and some civil servants[649]. There is only one tier within special schemes[650]. According to Rubel, there were 120 special schemes, out of which only 15 accepted new members and the remaining ones only paid out pensions[651]. Every special scheme has its own regulations. For example, a pension contribution for various groups of civil and military servants does not exceed the level of 7.85% and is entirely financed from the state budget[652]. The average retirement age is 60 but for some occupational groups it is lower and may be even equal to 50. An average period taken into account while calculating the pension is equal to 25 years but within some special schemes the period of last 6 months is taken into consideration.

**Scheme for the self-employed** consists of a central fund CANCAVA and 12 occupational funds, which may be divided into three groups: the ORGANIC (traders and entrepreneurs), the AVA (craftsmen), and the CNA (freelancers)[653]. That scheme, similarly to the general scheme, consists of two tiers[654].

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646 http://www.ircantec.fr/default.asp?chap=1&ref=3, accessed on 31 January 2008.

647 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 107.

648 In 2005 the minimum pension amounted to €599 a month. Cf.: *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 44.

649 da Conceição-Heldt E. (2007), p. 168.

650 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 44.

651 Rubel K. (2004b), p. 119.

652 da Conceição-Heldt E. (2007), p. 171.

653 Rubel K. (2004b), p. 121.

654 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 44.

**Scheme for farmers** applies to two groups of people: farmers and agricultural entrepreneurs[655]. That system consists of two tiers as well[656].

**Pension savings schemes**, which may be perceived as the equivalent of the 3rd pillar in France, operates in the form of a voluntary, auxiliary pension scheme. There is a possibility to choose the company, which would manage the assets gathered within the scheme, i.e. a state company (*Caisse Nationale de Prévoyance de la Fonction Publique*, PREFON) or an insurance company offering pension insurance contracts[657]. Pension savings scheme may be an auxiliary private pension scheme (*plan partenarial d'épargne salariale volontaire pour la retraite*, PPESVR) or subsidized by the state pension savings in banks or pension contracts in life insurance companies (PEIR)[658]. There is a separate voluntary pension scheme for the hospital personnel (*Comité de Gastion des Oeuvres Sociales*, CGOS)[659]. Moreover, there may be company or departmental pension schemes in the form of the PERP or the PERCO, in which the participation is connected with tax relief[660].

### 2.9.4 Challenges and planned changes in the pension system in France

The main challenge France has to face is to order the fragmented pension system for particular occupations. Another problem is the demographical situation, which may lead to the crisis due to the fact that baby-boomers started retiring since 2007[661]. From 2009 to 2012

655 Rubel K. (2004b), p. 121.
656 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 44.
657 da Conceição-Heldt E. (2007), p. 168.
658 da Conceição-Heldt E. (2007), pp. 170 and 173.
659 da Conceição-Heldt E. (2007), p. 173.
660 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 44.
661 Palier B. (2005), p. 94.

the required insurance period will rise by one quarter every year until it reaches the level of 164 quarters in 2012. From 2013 the number of quarters required for the retirement will depend on demographical factors[662]. According to the forecasts, the level of pension contribution will have to be raised to 25.9% in 2040[663].

### 2.9.5 Summary

The main element of the French pension system is the mandatory public system, which is divided into four categories for various groups of occupations. Three of those categories consist of a primary tier and an auxiliary tier. Those tiers may be generally perceived as the 1st and 2nd pension pillar. The 3rd pillar, which covers voluntary pension insurances, has a marginal meaning in France. The general scheme (*Régime generale*), which underwent parametrical reforms in 1993 and 2003, plays the most important role. The auxiliary tiers of the general scheme, the scheme for the self-employed and the scheme for farmers constitute a big mosaic of various solutions, partially based on investments on capital markets. It seems that the French spend more time on discussing the necessity of introducing changes than on executing them. Further reports, which were the subject of hot discussions, led only to parametrical reforms, leaving the changes in the system to next generations. The attempts to implement more radical changes are connected with a big resistance of the public, especially of trade unions.

Among solutions introduced in France, it is difficult to indicate those which particularly or favourably distinguish it from other countries. The only thing worth noticing is the equal retirement age for men and women. However, that solution is not unique internationally.

662 Rubel K. (2004b), p. 123.

663 Schludi M. (2005), p. 193.

## 2.10 GERMANY

### 2.10.1 General information about the country

The German Federal Republic[664] (*Bundesrepublik Deutschland*) is the country located in Central Europe, on the Baltic and North seas, comprised of 16 lands (*Ländes*).

The official language in the whole country is German. The biggest ethnic group were the Germans, accounting for 91.5% of the population. The biggest minority were Turks, 2.4% of the population. The biggest religious groups were the Catholics and the Protestants, each accounting for 34% of the population, and the Islamic population of 3.7%. As much as 28.3% of the population did not declare any religion. Pursuant to the Constitution of 1949, the President is the head of the state, and the Chancellor runs the government.

In May 1955 the Federal Republic of Germany (FRG) joined the NATO, and in 1957 became a member of the European Economic Community. In 1990 the lands of the German Democratic Republic (GDR) became a part of the FRG. In 1999 the united Germany joined the Economic and Monetary Union and replaced the German mark with the euro[665].

The current currency is the euro.

In 2007, the GDP *per capita* (PPP) was estimated at US$34,400, and the GDP growth rate at 2.6%; the public debt amounted to 65.3% of the GDP. The current national balance at the end of 2007 showed the surplus of US$185.1 billion.

The unemployment rate remained at 9.1%.

In July 2007 it was inhabited by 82,400,996 people[666] with the following age structure: 0-14 years of age – 13.9%, 15-64 years – 66.3%, 65 and more – 19.8%. The average life expectancy at birth was 78.95, 75.96 for men and 82.11 for women.

664 *Wielka Encyklopedia PWN* (2003), v. 18, pp. 534 and further.

665 The German mark (DEM) was replaced by the euro (EUR) at the rate of DEM1.95583 for EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 20 February 2008.

666 https://www.cia.gov/library/publications/the-world-factbook/geos/gm.html, accessed 31March 2008.

## 2.10.2 Historic development of the pension system in Germany

In Germany, the idea of paying benefits to those who cannot work any longer dates back to the middle of the 19$^{th}$ c. It was then that the Catholic bishop of Mainz[667] Wilhelm Emmanuel von Ketteler advocated that employers be obliged to pay compensation to those labourers who lost the ability to work, either temporarily or permanently, through no fault of theirs and while working. In so doing he created the foundations of the Catholic social sciences[668]. The first self-help organizations which also provided pension benefits were established. On 10 April 1854, the Prussian law on the miners' guilds (*Preußische Knappschaftsgesetz*) was passed[669]. 1859 marked the beginning of the first self-help organization of railwaymen (*Eisenbahnverwaltungen für ihre Arbeiter auf dem Gebiet der Sozialversicherung Versorgungskassen*)[670]. In 1881 the German Emperor Wilhelm I Friedrich Ludwig von Hohenzollern delivered an address (*Kaiserlichen Botschaft*) to Parliament, in which he ordered the state to provide care for the handicapped and disabled resulting from old age[671]. In 1883 the first state legal regulation on sickness insurance was introduced, and in 1884 – on accident insurance[672]. Soon, in **1889**, Germany was the first state in the world to enjoy legal regulation of

[667] After the Vienna Congress in 1815-1866, Mainz became part of the German Principality of Hessen-Darmstadt. In 1866, on establishment of the North-German Union, it became part of Prussia. From 1871, the King of Prussia was the hereditary German Emperor.

[668] Strzeszewski Cz. (1985), p. 233.

[669] It was the basis for the miners' guilds providing insurance for miners. In mid-19th c. they comprised the Federal Guild (Bundesknappschaft). Cf.: http://www.deutsche-rentenversicherung-knappschaft-bahn-see.de /nn_40284/ DRVKBS/de/Inhalt/1__UeberUns/6__geschichte/1__knappschaft/knappschaft_gen.html, accessed 27 December 2007.

[670] It was the basis for the Federal Railway Insurance Institution in the 2nd half of the 20th c. (Bahnversicherungsanstalt). Cf. : http://www.deutsche-rentenversicherung-knappschaft-bahn-see.de/ nn_40284/ DRVKBS/de/Inhalt/1__UeberUns/6__geschichte/2__bahn/bahngen.html, accessed 27 December 2007.

[671] Liedtke P. M. (2006).

[672] Ratajczak J. (2004), p. 239.

benefits and pensions (*Invaliditäts- und Alterversicherungsgesetz*)[673]. This is commonly attributed to the Chancellor of the German Empire, Otto von Bismarck[674]. The worldwide novelty of this solution concerned mainly the obligatory nature of pension insurance; a statutory obligation was introduced, and employers were held responsible for complying with it. The scheme covered blue- and white-collar workers on low incomes. It excluded miners, who stood by their own occupational pension scheme[675]. The original solution provided for paying pension contributions, investing the resources accumulated, and paying pension benefits. Contributions were paid 50% by the employee and 50% by the employer, and subsidized by the central budget. The average contribution, different for different income groups, amounted to 1.7% of the remuneration[676]. Employers transferred contributions accumulated to an insurance institution, which was under obligation to invest them in profitable ways and pay pensions. Thus, it was an obviously capital solution, devoid of individual records of contributions. The retirement age was defined as 70[677]. The minimal qualifying period of eligibility to payment was also a 30-year participation in the scheme[678]. In 1890 the first national insurance funds for labourers (*Landesversicherungsanstalten*, LVA) was established, known as *Versicherungsanstalten* (VA)[679], and in 1891 *Invaliditäts und Alterversicherungsgesetz* came into force. In 1907 the Sea Insurance Fund (*Seekasse*)[680] started. By 1911 the compulsory pension insurance covered all salaried staff (*Versicherungsgesetz für Angestellte*)[681]. In 1912 a separate

673 Schulze I., Jochem S. (2007), p. 671.
674 Rürup B. (2002), p. 137.
675 Czajka Z. (2003), pp. 146-147.
676 Schulze I., Jochem S. (2007), p. 671.
677 Żukowski M. (2006), p. 120.
678 Schulze I., Jochem S. (2007), p. 671.
679 http://de.wikipedia.org/wiki/Landesversicherungsanstalt, accessed 27 December 2007.
680 http://www.deutsche-rentenversicherung-knappschaft-bahn-see.de/ nn_40284/DRVKBS/de/Inhalt/1__UeberUns/6__geschichte/3__see/see.html, accessed 27 December 2007.
681 Schulze I., Jochem S. (2007), p. 671.

legal regulation on pensions for miners was introduced. In 1913 the retirement age was defined as 65[682], and a minimum contribution period was established at 10 years for men and 6 for women and the disabled[683]. 1919 witnessed the creation of the Federation of German Regional Insurance Institutions *(Verband Deutscher Landesversicherungsanstalte,* VDL*)*[684]. The Act of 1923 on miners' guilds introduced the uniform miners' insurance in the whole Reich, including health, disability and old age insurance[685], and the retirement age for labourers was lowered to 65[686]. In 1925, the first pension insurance companies were set up for craftsmen, the self-employed and authors (*Versorgungswerken*)[687]. The first legal regulation concerning unemployment emerged in 1927[688]. In 1929 the retirement age of 60 for unemployed clerks was introduced[689]. From 1933, the resources of the pension system started being used for implementing the government armament programme[690]. In 1938 the pension insurance for craftsmen was introduced, and the VDL was transformed into the National Union of German Pension Insurance Institutions *(Reichsverband Deutscher Rentenversicherungsträger,* RDR), whose name was changed in 1946 to the Union of German Pension Insurance Institutions *(Verband Deutscher Rentenversicherungsträger,* VDR*)*[691]. In 1948 in the Bizone, an Act was passed on an increase in pension contribution and equalization of pension rights for labourers

682 *Pension Reform and the Development of Pension Systems. An Evaluation of World Bank Assistance* (2006), p. 62.
683 Schulze I., Jochem S. (2007), p. 671.
684 http://www.deutsche-sozialversicherung.de/en/pension/history.html, accessed 23 December 2007.
685 Ratajczak J. (2004), p. 241.
686 Börsch-Supan A. H. and Wilke Ch. B. (2006), p. 574.
687 The Bavarian chemists' fund was established as the first one (*Bayerische Apothekerversorgung*). Cf.: *75 Jahre Bayerische Apothekerversorgung* (2000).
688 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 124.
689 Börsch-Supan A. H. and Wilke Ch. B. (2006), p. 574.
690 Schmähl W. (2005), p. 115.
691 http://www.deutsche-sozialversicherung.de/en/pension/history.html, accessed 23 December 2007.

and clerks[692]. In 1949 in East Germany, the pension system with a fixed contribution of the Soviet pay-as-you-go type was introduced. In 1953 in West Germany the Federal Insurance Company for Salaried Staff (*Bundesversicherungsanstalt für Angestellte*, BfA)[693] was established. Family benefits were first regulated in 1954[694]. 1957 brought the pay-as-you-go solution in the form of the so-called partial protection method (*Abschnittsdeckungsverfahren*)[695], together with pension indexation by the gross remuneration increase index. The capital system formula was replaced by the repartition method, which was dubbed the dynamic pension (*dynamische Rente*)[696]. Moreover, the pension insurance covered farmers[697], and local old age care funds for farmers sprang up, associated in the Federal Association of Farmers (*Alterssicherung der Landwirte*)[698]. The retirement age for women was defined as 60[699]. In 1960 the new law on pension insurance for craftsmen was drawn up. In 1968 the GDR introduced the additional voluntary pension scheme. The contribution stayed at 10% of the remuneration and could be paid by those with an annual income in DDM (East German marks) of 7,200 to 14,400. In 1972, about 21 thousand people received pensions from this system[700]. In 1972 in the FRG, voluntary pension insurance was offered to the self-employed and housewives[701]. In the same year the possibility to retire at the age of 63 for men and 60 for the unemployed and the disabled[702] was announced.

692 Czajka Z. (2003), p. 149.
693 Ruland F. (2005).
694 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 125.
695 Rürup B. (2002), p. 137.
696 Schulze I., Jochem S. (2007), p. 671.
697 Żukowski M. (2006), p. 121.
698 *Soziale Sicherheit in der Landwirtschaft. 50 Jahre Alterssicherung der Landwirte* (2007).
699 Börsch-Supan A. H. and Wilke Ch. B. (2006), p. 574.
700 The system was introduced pursuant to the regulation of 15 March 1968 – Gesetzblatt der Deutschen Demokratischen Republik, Part II, No. 29, 1 April 1968, pp. 154-160. Cf.: http://www.osa.ceu.hu/ files/ holdings /300/8/3/text/26-3-7.shtml, accessed 27 December 2007.
701 http://www.deutsche-sozialversicherung.de/en/pension/history.html, accessed 23 December 2007.
702 Börsch-Supan A., Schnabel R., Kohnz S., Mastrobuoni G. (2004), p. 289.

In 1974 the legal regulation on voluntary company pension schemes was passed[703]. In 1981 the pension contribution stayed at 18.5% of the remuneration[704]. From 1983 pensioners started paying health insurance contributions. In 1988 the law on health insurance was amended[705]. The reform of 1989 came into force from the beginning of 1992 (*Rentenreformgesetz*, RRG)[706]. It stipulated a gradual increase in the retirement age for men from 63 to 65 in 2000 and 2001, and for women from 60 to 65 years of age between 2000 and 2006[707]. Another crucial regulation was the change in the rule to index pensions in accordance with the net instead of gross remuneration. Moreover, there was the opportunity to continue work after reaching the retirement age with the pension increase of 0.5% for each month of further employment. Simultaneously, early retirement resulted in a 0.3% decrease in the pension for each month, however, to a level of no more than 10.8%[708]. The notion of the so-called 'standard pension' was coined, which meant the amount of pension for a person who would receive an average income after 45 years of work in the economy[709]. The reform also raised the amount of the federal subsidy to the pension scheme (*Bundeszeschuss*) to the level of 20% of total expenses[710]. In 1990, after unification, the West German solutions were implemented in the East Germany. However, the unification gave rise to difficulties, unforseen by the authors of the 1989 reform, which was enforced in 1992. The most significant one was high unemployment rate in the eastern lands, as well as the deterioration of the western economy. Moreover, the demographic structure was disadvantageous. From the beginning of 1995, the compulsory insurance

703 Czajka Z. (2003), p. 171.
704 Czajka Z. (2003), p. 150.
705 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 120.
706 Schludi M. (2005), p. 132.
707 Eventually, the retirement age for women was raised from 60 to 65 between January 2000 and December 2004. Cf.: Mattil B. (2006), p. 231.
708 Berkel B., Börsch-Supan A. (2005), p. 88.
709 Ratajczak J. (2004), p. 263.
710 Schludi M. (2005), p. 132.

contribution was introduced which was earmarked for the old age care[711]. In 1996 accident insurance law was amended[712]. From 1 July 1997, the early retirement age of civil servants was increased from 62 to 63[713]. Concurrently, with reference to civil servants, the rule was introduced that early retirement resulted in a 0.3% decrease in pension each month[714]. 1997 saw an amendment to the unemployment insurance law[715], and the pension contribution stayed at 20.3% of the gross remuneration[716]. The reform of 1997, which was supposed to come into force from the beginning of 1999, after the change of government, was substantially decreased. As early as in 1998, there was an increase in the VAT rate from 15% to 16%, and the 1% obtained was used to supplement the resources of the pension scheme[717]. At first, the reform was limited to considering the demographic factor related to life expectancy while calculating pensions and to an increase in the child care period (*Kindererziehungszeit*) to three years[718], which were calculated into the period of employment. However, finally, the demographic factor was discarded while calculating pensions. Instead, the base system became compulsory also for the self-employed owners of one-person companies, and the retirement age for the disabled was increased from 60 to 63[719]. Additional company pension schemes in 1999 in the western lands included 64% of those employed in industry and 28% of those employed in trade, while in the Eastern lands the numbers were 20% and 16% respectively[720]. In the same year as much as 47% of civil servants who retired that year took early retirement due to disability[721].

711 *Federal Republic of Germany. National Strategy Report on Old-Age Pension Provision 2005* (2005), p. 51.
712 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 122.
713 Börsch-Supan A., Schnabel R., Kohnz S., Mastrobuoni G. (2004), pp. 295-296.
714 Berkel B., Börsch-Supan A. (2005), p. 90.
715 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 124.
716 Schludi M. (2005), p. 135.
717 Schludi M. (2005), p. 139.
718 Rürup B. (2002), pp. 148-149.
719 Schulze I., Jochem S. (2007), p. 677.
720 Czajka Z. (2003), p. 176.
721 Berkel B., Börsch-Supan A. (2005), p. 91.

In 2000 it was decided that the ecology tax will be used to finance a part of the budget subsidy to the pension scheme[722]. In 2000 and 2001 pensions were temporarily indexed by the consumer prices index[723]. In 2001 the pension contribution amounted to 19.3% of remunerations, 50% of which was paid by the employer and 50% by the employee[724]. The standard pension from the base pension scheme stayed at DEM2,007.90 net in the western lands and DEM1,741.11 in the eastern lands[725]. In 2001 the base system covered 96% of men and 98% of women at the retirement age[726]. That year was the year of another pension reform, which came into existence at the beginning of 2002[727]. According to it, the pension contribution was to be changed depending on the demographic situation, with the top level of 22% of the remuneration. Moreover, the reform provided for the possibility of creating pensions in company pension schemes (the 2nd pillar), including pension funds[728] and individual accounts (the 3rd pillar). The introduction of the 2nd pillar was based on the assumption that the replacement rate from the 1st pillar would be reduced from 70% to 64%[729]. These solutions were to be aided by state subsidies to employees' contributions and tax incentives on the contributions paid. The aim for 2008 awaited an annual subsidy of €154 plus €185 annually for each child, and the tax relief was planned at 4% of the tax base[730]. Both company and individual schemes should plan for a retirement age of at least 60[731]. The minimal qualifying period of participation in the scheme was lowered from 10 to 5 years[732], while the

722 Schulze I., Jochem S. (2007), p. 674.
723 Schludi M. (2005), p. 150.
724 Rürup B. (2002), p. 138.
725 Rürup B. (2002), p. 142.
726 Mattil B. (2006), p. 93.
727 Czajka Z. (2003), p. 154.
728 Mattil B. (2006), p. 105.
729 Schulze I., Jochem S. (2007), p. 677.
730 Veil M. (2004), p. 217.
731 Czajka Z. (2003), pp. 158-159.
732 Schmähl W. (2005), p. 135.

age of the eligibility to join the company scheme fell from 35 to 30[733]. In 2002, in the base system, 80% of expenses were covered by contributions from participants, with the remaining part being supplemented by the budget subsidy[734]. In the same year, 9% of those eligible participated in additional pension insurance funds[735]. In 2003, the notion of minimal provision financed from general taxes (*bedarfsorientierte Grundsicherung*)[736] was introduced. Paid to those over 65, it was a part of the social care system, not the pension scheme[737]. In 2003, the resources available were sufficient to cover pensions for approximately half a month[738], and in additional professional pension schemes covered 54% of all the employed[739]. The so-called Rürup's commission report[740] of April 2003 advised *inter alia*: 1) to increase the retirement age from 65 to 67 between 2011 and 2035, 2) to penalize for early retirement, and 3) to decrease an annual rise in pensions that have already been granted[741]. From 1 January 2004, pension scheme institutions were obliged to send information on accumulated resources and the planned level of future pension to all insured people aged 27 and more[742]. In 2004 there was an amendment to the law on family benefits[743] and it was decided to gradually introduce tax on all pension payments under the EET formula[744] between 2005 and

[733] *Federal Republic of Germany. National Strategy Report on Old-Age Pension Provision 2005* (2005), p. 39.
[734] Holzmann R., MacKellar L., Rutkowski M., (2003), p. 30.
[735] *The Handbook of Western European Pension Politics* (2007), p. 891.
[736] Mattil B. (2006), p. 104.
[737] Żukowski M. (2006), p. 126.
[738] Schmähl W. (2005), p. 116.
[739] *The Handbook of Western European Pension Politics* (2007), p. 891.
[740] The commission's name was taken from the name of its head, the German economist Bert Rürup.
[741] http://www.eurofound.europa.eu/eiro/2003/05/feature/de0305104f.htm, accessed 27 December 2007.
[742] *Federal Republic of Germany. National Strategy Report on Old-Age Pension Provision 2005* (2005), p. 47.
[743] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 125.
[744] The pension plans taxation, where contributions, investment profits, and pension funds capital profits are exempt from tax, but pensions paid are taxed.

2040[745]. At the end of 2004, 4.2 million people participated in the private pension schemes of the 3rd pillar[746]. At the beginning of 2005, pension insurance law was amended concerning organizational structures (*Gesetz zur Organisationsreform der gesetzlichen Rentenversicherung*, RVOrgG). On this basis, on 1 October 2005, the Federation of German Pension Insurance Institutes (*Verband Deutscher Rentenversicherungsträger*, VDR), including 22 national insurance funds for labourers, each one for a specific land and city (*Landesversicherungsanstalten*, LVA), merged with the Federal Insurance Fund for Salaried Employees (*Bundesversicherungsan stalt für Angestellte*, BfA), resulting in a new institution, i.e. the German Union of Pension Insurance (*Deutsche Rentenversicherung Bund*, DRB). Moreover, professional funds for miners (*Bundesknappschaft*), sailors (*Seekasse*) and railwaymen (*Bahnversicherungsanstalt*) merged into another federal pension insurance institution, i.e. the German Pension Insurance for Miners-Railwaymen-Sailors (*Deutsche Rentenversicherung Knappschaft-Bahn-See*)[747]. Furthermore, in 2005 pension calculation was based again on the demographic index (*Nachhaltigkeitsfaktor*)[748], which depended on the ratio of those employed in the economy to the number of pensioners; the retirement age was increased from 60 to 63[749], and the new pension taxation law came into force[750]. In the middle of 2005, there were 15.3 million people in additional professional pension schemes, which accounted for 57% of all the employed[751]. The pension contribution

745 Mattil B. (2006), p. 103.

746 *Federal Republic of Germany. National Strategy Report on Old-Age Pension Provision 2005* (2005), p. 10.

747 http://www.uni-bielefeld.de/soz/Forschung/Projekte/regina/pdf/VDR%20Text.pdf, accessed 23 December 2007.

748 Mattil B. (2006), p. 99.

749 Schulze I., Jochem S. (2007), p. 678.

750 *Federal Republic of Germany. National Strategy Report on Old-Age Pension Provision 2005* (2005), p. 17.

751 *Federal Republic of Germany. National Strategy Report on Old-Age Pension Provision 2005* (2005), p. 10.

in the base system in 2005 amounted to 19.5% of the remuneration[752]. At the beginning of 2006, another correcting index was introduced into pension calculation, which took into consideration the ratio of the employee's gross remuneration to the top remuneration subject to contribution[753]. In June 2006, the implementation of electronic cards for pensioners started, under the eGovernment project[754]. In 2007, it was formally accepted that from the beginning of 2012, the retirement age would be raised from 65 to 67 by one month a year between 2012 and 2024, and by two months a year between 2024 and 2029. In fact, it means a retirement age of 67 for those born after 1963. In the case of those paying pension contributions for 45 years, the retirement age will remain at 65[755].

### 2.10.3 The present state of the pension system in Germany

The German pension system consists of three pillars: 1) base system, i.e. the 1st pillar, 2) additional occupational pension systems, i.e. the 2nd pillar, and 3) supplementary pension insurance, i.e. the 3rd pillar. The 'zero' pillar in Germany is the minimal security (*bedarfsorientierte Grundsicherung*), which is viewed as the element of the social security rather than a part of the pension system[756]. The present state of the pension system in Germany is presented in **Scheme no. 10**.

752 Schulze I., Jochem S. (2007), p. 673.
753 Mattil B. (2006), p. 99.
754 *OMNIKEY Delivers 35,000 Smart Card Readers to the German Pension Fund* (2006).
755 Lipiński Sł. (2007).
756 Schulze I., Jochem S. (2007), p. 674.

**Scheme no. 10**

**The present state of the pension system in Germany**

**1st pillar**

| | | |
|---|---|---|
| base system | | |
| the base pension scheme Gesetzliche Rentenversicherung, GRV | managed by theGerman Union of Pension Inusrance *Deutsche Rentenversicherung Bund*, DRB | |
| | managed by the German Pension Insurance for Miners-Railwaymen-Sailors *Deutsche Rentenversicherung Knappschaft-Bahn-See* | |
| the civil servants scheme *Beamtenversorgung* | | |
| the farmers scheme | managed by local old-age care funds, associated in the Federal Farmers' Association *Alterssicherung der Landwirte* | |
| the liberal professions scheme *Berufsstän dische Versorgungswerke* | | |

**2nd pillar**

| | | |
|---|---|---|
| additional occupational pension systems | | |
| compulsory | scheme for public sector employees *Zusatzversorgung Öffentlichen Dienst*, ZÖD | |
| voluntary occupational pension insurance *Betrieblische Altersvorsorge*, BaV | direct promise *Direktzusage* | supervised by the Pension Safeguarding Association *Pension-Sicher-ungs-Verein*, PSVaG |
| | the support fund *Unterstützungkasse* | |
| | direct insurance *Direktvesicherung* | supervised by the Federal Insurance Supervisory Institution *Bundesaufsichtsamt für das Vesicherungswesen* |
| | pension institution *Pensionkassse* | |
| | pension fund *Pensionfund* | |

**3rd pillar**

| | |
|---|---|
| supplementary pension insurance | supervised by the Federal Institution of Financial Market Supervision *Bundesanstalt für Finanzdienstleistungs- und Finanzmarktaufsicht* |

Source: Own elaboration.

**The base system** is mandatory and includes separate schemes[757]: the base pension scheme (*Gesetzliche Rentenversicherung*, GRV), the civil servants scheme (*Beamtenversorgung*), the farmers scheme and liberal professions scheme (*Berufsständische Versorgungswerke*). The self-employed who are not one-person companies may volunteer to participate in the system. The GRV provides special pension solution for miners.

The participants of **the base pension scheme** are all blue- and white-collar workers, sailors and railwaymen[758]. The retirement age is 65, and the qualifying contribution period is at least five years (*Wartezeit*)[759]. Early retirement is possible at the age of 63 provided there is a 35-year period of employment[760]. Moreover, severely disabled may take a standard retirement at 63 provided they have a 35-year period of employment, or early retirement at 60. Postponed retirement is rewarded with an 0.5% increase in pension for each month of further employment. Contributions stay at 19.9%[761] and are paid equally by both the employee and the employer[762]. For persons with a monthly income of up to €400, a contribution of 12% of the remuneration is paid solely by employers. In the case of miners, sailors and railwaymen, the contribution paid by the employer amounts to 16.45% of gross remuneration and contribution paid by the employee amounts to 9.95%[763]. Contributions are paid up to 180%[764] of average gross remuneration in a previous year, and for 2008 it was €63,600 annually in the western part of the country and €54,000 in the east. In the case of miners, sailors and railwaymen, the upper limit in 2008 is €78,600 annually

757 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 22.
758 Schulze I., Jochem S. (2007), p. 674.
759 Schludi M. (2005), p. 129.
760 Whitehouse E. (2007), p. 74.
761 http://www.bmas.de/coremedia/generator/23030/2007__12__21__aenderungen__2008__kurz.html, accessed 27 December 2007.
762 http://www.dia-vorsorge.de/df_010117.htm, accessed 23 December 2007.
763 http://www.bmas.de/coremedia/generator/23030/2007__12__21__aenderungen__2008__kurz.html, accessed 27 December 2007.
764 Legros F. (2006), p. 207.

in the west and €66,600 in the east[765]. Earnings up to €400 monthly are exempt from contributions paid by the employee[766], while those with a monthly income from €401 to €800 pay a reduced but progressively increasing contribution[767]. Another source of financing pensions is a budget subsidy accounting for about 24% of the pensions paid[768]. The subsidy includes three elements: 1) general subsidy dependent on changes in the average gross remuneration and in contribution rate, 2) additional subsidy amounting to 1% of income from VAT and 3) supplementation of the additional subsidy from the ecology tax[769]. The value of monthly pension depends on: 1) the number of the so-called personal earnings points (*Entgeltpunkte*), 2) the retirement age formula index (*Rentenformel*), 3) the current pension value (*aktueller Rentenwert*), 4) the demographic factor (*Nachhaltigkeitsfaktor*), and 5) the corrective factor[770]. The personal earning point is a quotient of the individual and average contribution base for all insured persons in a given year. The number of earning points is the sum of earning points awarded in the subsequent years. The retirement age index depends on the real age of leaving professional activity. Early retirement results in an 0.3% decrease in the index for each month of early retirement, while postponed retirement is rewarded with an 0.5% increase in the index for each month of that retirement taken later than the statutory age[771]. Current pension value (*aktueller Rentenwert*) is changed every year by an administrative decision[772]. The scheme assumes that a 'standard' insured person (*Eckrentner*) after 45 years of contribution should receive the pension of the value of 64% of his or her earlier net income[773]. Pensions

765 http://www.bmas.de/coremedia/generator/23022/2007__12__21__aenderungen__2008.html, accessed 27 December 2007.
766 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 118.
767 Schulze I., Jochem S. (2007), p. 673.
768 Mattil B. (2006), p. 97.
769 Ratajczak J. (2004), p. 246.
770 Mattil B. (2006), p. 98.
771 Ratajczak J. (2004), pp. 257-258.
772 From 1 July 2003. In 2003 its value stayed at €26.13 in Western lands and €22.97 in Eastern lands. Cf.: Mattil B. (2006), p. 232.
773 A standard insured person is an insured person who would receive a standard pension.

paid are taxable according to general rules[774]; however, most pensions are paid below the taxable level. The system is managed by the German Union of Pension Insurance (*Deutsche Rentenversicherung Bund*, DRB) and the German Pension Insurance for Miners-Railwaymen-Sailors (*Deutsche Rentenversicherung Knappschaft-Bahn-See*).

In **the civil servants scheme**[775], insurance contributions are not paid and benefits are paid from the budget. The retirement age stays at 65; early retirement from the age of 63 results in a 0.3% decrease in pension for each month of early retirement. The amount of standard pension depends on three factors: 1) the amount of the latest gross remuneration, 2) the replacement rate connected with the number of years of seniority, and 3) the index related to early retirement[776]. The maximum replacement rate is 75% in relation to gross remuneration. This rate is achievable after 35 years of civil service, which causes only 20% of civil servants to retire at the age of 65[777]. Pensions paid are taxable according to general rules.

**The farmers scheme** is managed by local old-age care funds, associated in the Federal Farmers' Association (*Alterssicherung der Landwirte*).
**Liberal professions scheme** is financed from contributions which are invested in capital markets[778].

**Additional occupational pension systems** are voluntary apart from the additional pension scheme for public sector employees (*Zusatzversorgung Öffentlichen Dienst*, ZÖD), for whom it is compulsory. There is no additional pension scheme for civil servants. In the private sector, there are 5 ways of occupational pension insurance (*Betrieblische Altersvorsorge*, BaV)[779]: 1) direct promise (*Direktzusage*), 2) the support fund (*Unterstützungkasse*), 3) direct insurance (*Direktvesicherung*), 4) pension institution (*Pensionkassse*), and 5) pension fund (*Pensionfund*). Participation in the scheme is allowed

[774] Ratajczak J. (2004), p. 260.
[775] This group includes *inter alia* judges and professional soldiers.
[776] Börsch-Supan A., Schnabel R., Kohnz S., Mastrobuoni G. (2004), p. 296.
[777] Börsch-Supan A. H. and Wilke Ch. B. (2006), pp. 586-587.
[778] *The Handbook of Western European Pension Politics* (2007), p. 891.
[779] Mattil B. (2006), p. 236.

for persons at the age of 30 and more. A minimal qualifying period is 5 years[780]. Contributions paid to this scheme are exempt from tax and the duty to pay social insurance contribution up to 4% of the base[781]. Schemes are enjoying increasing popularity and frequently are included in the group contracts between employers and trade unions. Most occupational programmes are based on the formula of defined benefit, which depends of the number of years of participation in the scheme as well as income. Some programmes define the target replacement rate considering the GRV benefit[782]. Pensions should be paid until 85 years of age to the pensioner. They are taxed according to general rules, and the scheme follows the EET formula. The running of direct insurance programmes (*Direktvesicherung*), pension institution (*Pensionkassse*) and pension funds (*Pensionfund*) is supervised by the Federal Insurance Supervisory Institution *(Bundesaufsichtsamt für das Vesicherungswesen*)[783]. Protection against the employer's insolvency concerning direct promise (*Direktzusage*) and support fund (*Unterstützungkasse*) is provided by the Pension Safeguarding Association (*Pension-Sicher-ungs-Verein*, PSVaG)[784].

**Supplementary pension insurance** (*Riester-Rente*) can be implemented as: 1) private old-age security in life insurance companies (*Private Rentenversicherung*), 2) residential investments, 3) bank savings (*Banksparplan*), 4) buying shares, 5) savings in pension funds which invest in capital markets (*Fondssparplan*). In 2008 the scheme was supported by a budget subsidy for those saving to the value of €154 plus €185 for each child. Schemes stipulate pension payment after the age of 60 and the one-time payment of 30% of accumulated resources. Schemes are under the supervision of the Federal Institution of Financial Market Supervision (*Bundesanstalt für Finanzdienstleistungs- und Finanzmarktaufsicht*)[785].

780 *Federal Republic of Germany. National Strategy Report on Old-Age Pension Provision 2005* (2005), p. 39.
781 Żukowski M. (2006), pp. 126-127.
782 Mattil B. (2006), p. 107.
783 Börsch-Supan A. H. and Wilke Ch. B. (2006), p. 595.
784 *The Handbook of Western European Pension Politics* (2007), p. 891.
785 Börsch-Supan A. H. and Wilke Ch. B. (2006), p. 593.

### 2.10.4 Challenges and planned changes in the pension system in Germany

The greatest challenge facing the pension scheme in Germany is the demographic situation. Other problem areas are increasing pension costs, budget pressure, falling replacement rates or a high unemployment rate[786]. The situation is aggravated by a growing popularity of early retirement, which lowers the real average retirement age[787] to 59.5 years of age[788]. Newly-accepted regulations define future pension contribution at 20% of remuneration to 2020 and 22% in 2030[789]. All these prove a growing pressure on public finance for the pension scheme.

### 2.10.5 Summary

Pension system in Germany for many years constituted a significant element of the welfare state. It was a few years ago that the Germans started their pension system reform for fear of 'the demographic bomb' effect. Transformation concerns not only parametric changes, though the decisions taken in this area are quite radical yet gradual, for instance, the increase in retirement age to 67. Establishment of the 2nd and 3rd pillar should be regarded as a systemic change. As it seems, the crucial factor for development of the German pension market will be the dynamics of economic growth.

Among interesting solutions applied to the German pension system, which could be disseminated internationally, the system of electronic cards for pensioners is worth emphasizing.

[786] Schulze I., Jochem S. (2007), p. 660.
[787] Ratajczak J. (2004), p. 263.
[788] Börsch-Supan A., Schnabel R., Kohnz S., Mastrobuoni G. (2004), p. 285.
[789] *Federal Republic of Germany. National Strategy Report on Old-Age Pension Provision 2005* (2005), p. 8.

## 2.11 GREECE

### 2.11.1 General information about the country

The Hellenic Republic[790] (*Ελληνική Δημοκρατία*) is a country located in the south-eastern part of Europe, on the Mediterranean Sea. It embraces the southern part of the Balkan Peninsula, the Ionian Islands, Crete and groups of islands: Northern Sporades, Southern Sporades, and the Cycladic Islands. The country consists of 9 peripheries (*περιφέρειες)*, which embrace 54 prefectures (*νομοί* – *nomoí*).

The official language is Greek. The largest ethnic group were the Greek, who accounted for 93% of the population. The largest denomination was the Greek Orthodox Church, whose adherents made up 93% of the population, while the Muslims amounted to 1.3% of the population.

According to the Constitution of 1975, the President of Greece is the head of state, while the Prime Minister is the head of government.

In 1952 Greece joined the NATO. in 1981 it joined the European Economic Community. In 2001 Greece joined the Economic and Monetary Union exchanging the Greek drachma into the euro[791].

The current currency of Greece is the euro.

The GDP *per capita* (PPP) was estimated at US$30,500 in 2007, the GDP growth was recorded at 3.7%, and the public debt made up 81.7% of the GDP; the current account deficit was equal to US$36.4 billion.

Unemployment rate was 8.4%.

In 2007 Greece had a population of 10,706,290[792] with the following age structure: 0-14 years of age – 14.3%, 15-64 years of age – 66.7%, 65 years of age and over – 19.0%. Life expectancy at birth for total population was 79.38 years, for men – 76.85 years and for women – 82.06 years.

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790 *Wielka Encyklopedia PWN* (2002), v. 10, pp. 410 and further.

791 Greek drachmas (GRD) were converted into the euro (EUR) at the exchange rate of GRD340.750 per EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 31 March 2008.

792 https://www.cia.gov/library/publications/the-world-factbook/geos/gr.html, accessed 31March 2008.

## 2.11.2 Historic development of the pension system in Greece

In 1861 the first social insurance fund was introduced. It applied to public servants and people working in difficult conditions[793] including veterans – officers of the Hellenic Army and Hellenic Navy. In 1882 the Miners' Pension Fund was established[794]. In 1914 the first regulations concerning accident insurance were adopted[795]. The law of 1922 made the state responsible for the social insurances[796] and in the same year, the first health insurance law was introduced[797]. In 1925 the first pension fund for the self-employed was set up[798]. The beginnings of the Greek pension system date back to **1934**, when the first law concerning pension insurances was adopted[799]. In 1937 the Social Insurance Institute (*Ίδρυμα Κοινωνικών Ασφαλίσεων*)[800], which is the largest Social Security Organisation in Greece, started operating in Athens, Piraeus and Thessaloniki. From 1945 various auxiliary occupational pension funds started being set up[801]. In 1951 a new social security law was introduced. It expanded the range of insured occupational groups, introduced the new method of pension calculation, which favoured the persons with low remuneration, introduced the mechanism of pension indexation against inflation[802], and the IKA covered the whole country[803]. The minimum pension and the method of financing the contributions through the state were also implemented at that point. The first unemployment law was introduced in 1957 and the regulations concerning family allowances came into force in

793 Triantafillou P. (2007), p. 109.
794 Fuduli K. (1997).
795 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 131.
796 Triantafillou P. (2007), p. 110.
797 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 130.
798 Fuduli K. (1997).
799 Owczarek J. (2004), p. 133.
800 The abbreviation of the name in Latin is `IKA´. Currently, it is the largest Social Security Organisation in Greece. Cf.: Triantafillou P. (2007), p. 110.
801 Fuduli K. (1997).
802 Triantafillou P. (2007), p. 110.
803 Fuduli K. (1997).

1958[804]. In 1961 the pension system for farmers was implemented. It was administered by the Farmers' Insurance Organisation[805]. That system was financed through members' contributions, taxes and customs – 10% of an individual income tax, 15% of a corporate tax and money from customs on cigarettes and luxurious commodities[806]. In 1979, the Auxiliary Insurance Fund for Hired Workers (*Ταμ. Επικ. Ασφαλ. Μισθωτών*) was founded[807]. In 1981 the law concerning special non-contributory pensions was introduced[808]. In 1982 the level of pensions for farmers payable within the OGA schemes was raised[809]. At the same time the level of pensions for other self-employed people: craftsmen (*Ταμείο Επαγγελματιών και Βιοτεχνών Ελλάδος*)[810], shop owners (*Ταμείο Εμπόρων*)[811], and drivers (*Ταμείο Συντάξεων Αυτοκινητιστών*)[812] was also increased. In addition, pensions for those at the age of over 70, who did not have any other source of income, were introduced in 1982[813]. Since 1 January 1983, the auxiliary tier of public pension system, called the TEAM, has been in force[814]. In the same year the health insurance law was revised[815]. In 1985 unemployment allowances were introduced[816]. In 1987 the auxiliary tier of pension insurance system for farmers was introduced[817]. In 1990 there was a serious crisis of social security system[818], as a result of which parametric reforms of the system were carried out. According to them, the retirement age for men

804 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 133.
805 The abbreviation of the name in Latin is `OGA´. Cf.: http://www.oga.gr/, accessed 5 February 2008.
806 Triantafillou P. (2007), p. 110.
807 The abbreviation of the name in Latin is `TEAM´.
808 Owczarek J. (2004), p. 133.
809 *The Greek National Strategy Report on Pension* (2005), p. 12.
810 The abbreviation of the name in Latin is `TEVE´.
811 The abbreviation of the name in Latin is `TAE´.
812 The abbreviation of the name in Latin is `TSA´.
813 Triantafillou P. (2007), p. 124.
814 http://www.ika.gr/en/english.doc, accessed 5 February 2008.
815 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 130.
816 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 133.
817 Triantafillou P. (2007), p. 124.
818 Owczarek J. (2004), p. 134.

was raised to 65 and for women to 60, the minimum contribution period was increased, the period taken into account while calculating the pension was extended from 2 to 5 years, the maximum level of income necessary to calculate pension contributions was raised, the level of pension was reduced while taking advantage of early retirement, pension contributions for public servants were introduced, the retirement age for public servants was estimated at 60 for men and at 58 for women and special pension funds in banking, telecommunications, power industry and public transport were abolished[819]. The reform of 1992 divided the members into two groups – those insured before 1 January 1993 and those entering the system after that date. The retirement age for the former group was determined at 65 for men and at 60 for women, and for the latter group the retirement age for both, men and women, was estimated at 65. Moreover, the level of contributions for public servants and the self-employed was raised, the replacement rate was determined at 60% in primary funds and 20% in auxiliary funds, and special benefits were excluded from calculating pensions[820]. In 1996 a pension benefit, called *Επίδομα Κοινωνικής Αλληλεγγύης Συνταξιούχων*[821], was introduced. In 1997 the OGA was turned into a public institution and lost its former independence[822]. In 1998 the pension contribution for the first group (those insured before 1 January 1993) amounted to 20%, out of which the employee paid 13.33% and the employer paid 6.67%. In case of the latter group (people insured after 1 January 1993), the pension contribution made up 30%, out of which the employee paid 13.33%, the employer paid 6.67%, and the state paid 10.0%[823]. In 1998 the rules of the OGA operating were changed[824]. In 1999 the retirement age for women was ultimately raised to 65[825] and more than ten pension institutions for the self-employed were included into the TEVE. From that moment on, the self-employed transferred contributions

819 Triantafillou P. (2007), p. 119.
820 Triantafillou P. (2007), p. 120.
821 The abbreviation of the name in Latin is `EKAS´. Cf.: Owczarek J. (2004), p. 134.
822 Fuduli K. (1997).
823 Owczarek J. (2004), p. 137.
824 http://www.oga.gr/, accessed 5 February 2008.
825 Triantafillou P. (2007), p. 120.

to one of three institutions: the TEVE, the TAE, or the TAS. In 2001 there were 170 pension funds, out of which 63 paid out primary and auxiliary pensions[826]. The reform of 2002 established the institution of the National Actuary[827], and introduced voluntary occupational pension funds, which were managed by social partners constituting the 2nd pillar of the pension system in Greece[828]. Moreover, the retirement age for all pension funds was estimated at 65 and the contribution period required for the full pension was increased from 35 to 40. The period taken into account while calculating pensions was also extended from 5 to 10 years[829]. In 2002 spending on public pensions amounted to 12% of the GDP[830]. At that point, the IKA covered 33.96% of pensioners, the OGA 46.25%, and the TEVE 5.79%[831]. Since 1 January 2005, the pension has been calculated based on the average remuneration over 5 best years within the period of 10 last years[832], and the former name TEAM was changed into the ETAM. In July 2005, 11 former pension schemes were turned into one common pension system for banking sector[833]. On 1 January 2007, a new pension system institution for the self-employed (*Οργανισμός Ασφάλισης Ελευθέρων Επαγγελματιών*)[834] started operating. It replaced the TEVE, the TAE and the TAS.

### 2.11.3 The present state of the pension system in Greece

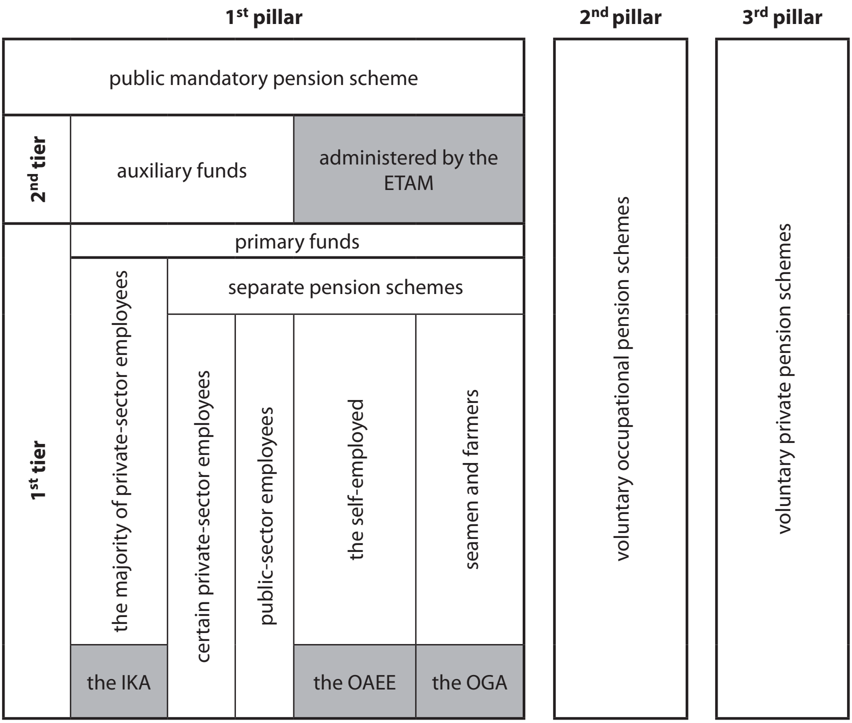
The Greek pension system consists of three pillars[835]: 1) public mandatory pension scheme, 2) voluntary occupational pension schemes,

826 Triantafillou P. (2007), p. 112.
827 Owczarek J. (2004), p. 148.
828 Triantafillou P. (2007), p. 113.
829 Triantafillou P. (2007), p. 121.
830 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 31.
831 Triantafillou P. (2007), p. 111.
832 *The Greek National Strategy Report on Pension* (2005), p. 11.
833 *Greek parliament passes new bank pension funds law* (2005).
834 The abbreviation of the name in Latin is `OAEE'. Cf.: http://www.go-online.gr/training/enot2/kef4/math2/html/3-3-2.html?PHPSESSID=a0ff3a388e308d15, accessed 5 February 2008.
835 Owczarek J. (2004), p. 135.

and 3) voluntary private pension schemes. The present state of the pension system in Greece is presented in **Scheme no. 11**.

**Scheme no. 11**

**The present state of the pension system in Greece**




Source: Own elaboration.

**Public mandatory pension scheme** consists of two tiers: a) primary funds, and b) auxiliary funds.

**Primary funds** are based on the pay-as-you-go rule and the level of pension is calculated on the defined benefit (DB) basis. There are plenty of schemes within this system. The largest form of organization within this area is the IKA, which provides pension schemes for the majority of private-sector employees. In addition, some professional groups have separate pension schemes[836], which apply to: certain private-sector employees (e.g. employees of banking sector or journalists), public-sector employees, and other groups treated as public-sector employees (e.g. civil servants or public servants), the self-employed (the OAEE – this scheme embraces craftsmen, buyers, car traders and mechanics), seamen and farmers (the OGA). The IKA is financed through contributions (78.3%), social taxes (13.74%), state contributions (4.5%), assets of the system (0.5%), and other sources (2.93%)[837]. The pension contribution amounts to 30% of gross remuneration, out of which the employer pays 13.33%, the employee pays 6.67%, and the state pays 10.0%[838]. The minimum contribution period was estimated at 4,500 days of work[839], and the contribution period required for the full retirement equals to 11,000 days of work[840]. There is no minimum level of remuneration in the system up to which a person is exempt from paying pension contributions but there is a maximum level[841]. The retirement age for those who joined the system before 1 January 1993, was estimated at 65 years for men and 60 years for women. In the case of those who have entered the system since 1 January 1993, the retirement age is the same for men and women and is equal to 65 years[842]. It is possible to retire early: for those who joined the system before 1 January 1993, the retirement age for women is from 53 to 57 and for men from 53 to 62. For people who have entered the system since that date, the retirement age is equal to 60 regardless of gender. The detailed retirement age of early retirement is related to the contribution

836 Owczarek J. (2004), p. 136.

837 Triantafillou P. (2007), p. 112.

838 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 127.

839 http://www.ika.gr/en/english.doc, accessed 5 February 2008.

840 Whitehouse E. (2007), p. 77.

841 In 2006 the maximum level of remuneration for persons who had entered the system since 1 January 1993 was €68,337.92. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 127.

842 Owczarek J. (2004), p. 139.

period and other factors[843]. Moreover, the level of early pension may be equal to the full or reduced level of pension. The level of pension is related to the level of remuneration and the contribution period. For those who have entered the labour market since 1 January 1993, the pension amounts to 2% for every year of work but no more than 35 years and is related to an average remuneration over 5 best years within the period of 10 last years preceding the retirement[844]. There is a minimum and maximum pension in the system[845]. Pensions are payable 14 times a year – two extra pensions are paid out twice a year at different times[846]. People who receive low income, which does not exceed €7,452.32 a year, are subject to a pension benefit, called the EKAS, which amounts to from €48.79 to €195.15 a month[847]. Payable pensions are subject to individual income tax according to general rules. However, pensioners do not pay social security contributions[848].

**Auxiliary funds** are administered by the ETAM and cover all employees being subject to the IKA who do not participate in another auxiliary scheme. This tier is completely mandatory[849]. It is provided that this tier should constitute 20% of the pensioner's income[850]. The ETAM contribution amounts to 6% of the remuneration and is equally financed by the employer and the employee[851]. Simultaneously, there are other 14 pension funds in the auxiliary tier[852].

**Voluntary occupational pension funds** are organised by employers and are completely voluntary. Those schemes may be funded or unfunded

843 The detailed rules are described in the thesis by Owczarek: Owczarek J. (2004), p. 140.
844 Whitehouse E. (2007), p. 77.
845 In 2002 the minimum pension amounted to €377 a month and the maximum pension equalled to €2,144 a month. Cf.: Whitehouse E. (2007), p. 77.
846 Whitehouse E. (2007), p. 77.
847 http://www.ika.gr/gr/infopages/asf/pensions/ekas.cfm, accessed 5 February 2008.
848 Whitehouse E. (2007), p. 78.
849 Triantafillou P. (2007), p. 112.
850 Whitehouse E. (2007), p. 77.
851 Triantafillou P. (2007), p. 116.
852 Triantafillou P. (2007), p. 112.

depending on the employer's choice. In a majority of schemes contributions are paid only by employers. Capital gains from pension assets are exempt from income tax. Pensions are paid out according to general rules. In 2003 only 5% of active population belonged to occupational pension funds[853].

**Voluntary private pension schemes** are a form of a pension scheme offered by a life insurance company. Benefits are usually paid out in the form of a single lump sum. Sporadically lifetime payments are offered[854].

### 2.11.4 Challenges and planned changes in the pension system in Greece

The main challenge for the Greek pension system is to regain trust of the public towards the social security system after the crisis of 1990[855]. Another important factor which influences the pension system is the ageing of the society. It results from the decreasing birth rates and the increasing life expectancy[856]. It is predicted that for that reason public pension spending will go up to 25% of the GDP in 2035[857]. The institutional fragmentation of the public pension system and the lack of uniform solutions in that area constitute another important obstacle. Its consequences are sharp differences between the benefits while paying the same contributions. A wide range of pension privileges is another problem the Greek will have to face in future. The high unemployment rate, especially among women, leads to the lack of liquidity of the Greek pension system[858].

853 Owczarek J. (2004), p. 138.
854 Owczarek J. (2004), p. 138.
855 Owczarek J. (2004), p. 145.
856 *The Greek National Strategy Report on Pension* (2005), p. 8.
857 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 31.
858 *The Greek National Strategy Report on Pension* (2005), p. 8.

### 2.11.5 Summary

The Greek pension system is characterized by a big institutional fragmentation, the existence of 'old' and 'new' pensions, and the lack of interest in funded pensions. Almost the whole older population is covered by the public pension system[859]. Due to the fact that it is based on the pay-as-you-go rule, which is partially financed through taxes, it is a big burden on the budget, especially in the wake of a decrease in active population. The condition of the pension system in Greece is commonly considered to be impossible to maintain in the long run[860]. Although the reform of 2002 was an important element of parametric changes, it had a limited scope[861]. Many media commentaries[862] perceive further amendments in the pension system to be the most important task for the government formed after the parliamentary election of September 2007.

The solution worth noticing in the Greek pension system is the unique in Europe institution of the National Actuary.

## 2.12 HUNGARY

### 2.12.1 General information about the country

The Republic of Hungary[863] (*Magyar Köztársaság*) is a landlocked country located in central lowland Europe, comprised of 19 comitats (*megye*), 22 cities based on the rights of the comitats (*megyei jogú város*), 214 cities (*város*), 2898 districts.

The official language is Hungarian. The largest ethnic group were the Hungarians (92.3% of the population). The largest national minority were

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859 *Pensions* (2007).

860 In some summaries of the Greek pension system, it is defined as a`*fiscal time-bomb'*. Cf.: Papachristou H. (2007).

861 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 35.

862 *Greek prime minister vows to proceed with reforms if re-elected* (2007), and Ferliel A. (2007).

863 *Wielka Encyklopedia PWN* (2005), v. 29, pp.138 and further.

the Gypsies (1.9% of the population). The largest religious group were the Catholics (51.9% of the population). 25.6% of the population indicates no religion and 15.9% were the Calvinists. According to the Constitution of the country from 1949, the head of the state is the President, and the government is led by the Prime Minister.

In 1999 Hungary joined the NATO, and in 2004 it became a member of the European Union.

The currency is forint (HUF[864], *Magyar forint*).

The GDP *per capita* (PPP) was estimated in 2007 at US$19,500, with a growth rate of 2.1%, and the public debt was 70.2% of the GDP. The current national balance at the end of 2007 showed the deficit of US$6.681 billion.

The unemployment rate was 7.1%.

In July 2007 the population of Hungary was 9,956,108 people[865], with the following age groups: 0-14 years of age – 15.3%, 15-64 years of age – 69.3%, 65 years of age and older – 15.4%. The overall life expectancy at birth was 72.92 years: 68.73 years for men and 77.38 years for women.

### 2.12.2 The historic development of the pension system

The beginnings of pension solutions in Hungary date back to the times of the Hapsburg Monarchy and constituted the continuation of the system based on Bismarck's pattern of the Austro-Hungarian Empire. The Bismarck's model predicted the existence of separate systems for particular professional groups and initially included civil servants, white-collar workers and miners. The first legislation concerning the system of accident insurance dates from 1890[866], and health insurance including also benefits for people at the older age dates from 1891[867]. In 1913, the legal regulation of civil servants' pensions was created, and in 1929,

[864] According to the ISO 4217 standard. On 31 December EUR1 was worth HUF253,73. Cf.: http://www.ecb.int/stats/exchage/eurofxref/html/eorofxref-graph-huf.en.html, accessed 24 February 2008.

[865] https://www.cia.gov./library/publications/the-world-factbook/geos/hu.html, accessed 31March 2008.

[866] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 145.

[867] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 143.

common legal regulation from **1928**[868] concerning pensions[869] began to apply. The system was a fully capital solution with a defined benefit[870]. The pension depended on income base, which was established on the basis of three best years out of the last five before retirement, and the retirement age was 65 for both women and men. In 1936, a separate pension regulation for farmers was created. The first pensions of common distribution were paid out in 1937[871]. In 1938 the first legal regulation in the field of family benefits[872] was established. In 1944 the solution pay-as-you-go was accepted, and the retirement age for both sexes was decreased to the age of 60, while in 1949 in the case of women to the age of 55. In 1957 the first legal regulation referring to unemployment was set up[873]. After the collectivization of agriculture in 1961, the separate system for farmers[874] was abolished. By the decree of 1975, a new unified pension law was introduced[875]. The Central Social Insurance Administration (*Országos Nyugdijbiztositási Föigazgatóság*, ONYF)[876] took control of administering pensions. In 1991 the law on unemployment was amended[877]. In 1992 it was defined that pension contributions were paid merely up to the determined income[878] level, and in order to calculate pensions all years after 1987 would be taken into account[879]. In 1994 on the grounds of the regulation[880] of 1993[881], optional collective retirement

868 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 141.
869 Gál R. I., Mogyorósy Z., Szende Á., Szivós P. (2003), p. 22.
870 Zoltán Á. (2004), p. 2.
871 Żukowski M. (2006), p. 102.
872 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 148.
873 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 147.
874 Simonovits A. (2002), p. 4.
875 Żukowski M. (2006), p. 102.
876 http://www.onyf.hu/, accessed 3 February 2008.
877 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 147.
878 Whitehouse E. (2007), p. 139.
879 Gál R. I., Mogyorósy Z., Szende Á., Szivós P. (2003), p. 34.
880 1993.évi XCVI. Törvény az Önkéntes Kölcsönös Biztosító Pénztárakról, access at: http:/www.khmedicina.hu/attachments/156/1993_opt.pdf.
881 *Joint report on Social Protection and Social Inclusion, Pensions, Healthcare and Long Term Care* (2007), p. 305.

schemes began to function, which belonged to the 3rd pillar of the pension system, which were handled by 270 retirement funds[882]. Contributions transferred to 3rd pillar were covered with tax allowance at a rate of 50% of the value of the amounts transferred to the 3rd pillar but not exceeding HUF200,000 annually[883]. However, contributions paid by the employer were the part of the employer's tax deductible expenses. A pension contribution in the basic scheme equalled 30.5% of the remuneration, of which 24.5% was paid by the employer and 6.0% by the employee[884]. In the summer of 1997, by three legal acts[885] a fundamental change concerning functioning of the pension system[886] was introduced. In the same year, there was the amendment of legal regulations related to health insurance, accident insurance and family benefits[887]. Further functioning of the 1st pillar in the formula pay-as-you-go and expanding it with the 2nd fully capital pillar was taken into account as a new solution. The changes in the 1st pillar were connected with increasing the retirement age[888]. The insurance contribution, which was determined as 30% of the remuneration, was expected to be transferred to the 2nd pillar at a rate[889] of 6.0% of the remuneration in 1998; 7.0% in 1999 and eventually 8.0% in 2000. At the same time, the contribution paid by the employer was due to be decreased (in the following years) from 24% in 1998 to 22% in 2000, and simultaneously the contribution paid by the employee was due to be increased in an appropriate way[890]. The new solution came into force on

882 Rocha R. and Vittas D. (2002), p. 393.
883 *National Strategy Report on Adequate and Sustainable Pensions: Hungary* (2005), p. 9.
884 Gál R. I., Mogyorósy Z., Szende Á., Szivós P. (2003), p. 37.
885 1) 1997. Évi LXXX. *Törvény a társadalombiztosítás ellátásaira és a magánnyugdíjra jogosultakról, valamint e szolgáltatások fedezetéről*, 2) 1997. Évi LXXXI. *Törvény a társadalombiztositási,* and 3) 1997. Évi LXXXII. *Törvény a magánnyugdíjról és a magánnyugdíjpénztárakról*.
886 Rocha R. and Vittas D. (2002), p. 365.
887 *Social Security Programs Throughout the World: Europe, 2006* (2006), pp. 144, 145 and 148.
888 Fults E. (2004), p. 58.
889 Rocha R. and Vittas D. (2002), p. 373.
890 Gál R.I., Mogyorósy Z., Szende Á., Szivós P. (2003), p. 42.

1 January 1998[891] and was compulsory for all people taking up their first employment after 1 July 1998. The reform, which aimed at obtaining a replacement rate of 60%[892], institutes the following changes[893]: 1) increasing the retirement age for both women and men to the age of 62[894], 2) increasing the minimum period of paying pension contributions, 3) increasing the penalty and reward for early or postponed retirement, 4) liquidation of distribution elements in form of pension calculations, 5) a new system in the range of taxing pensions, 6) the change in the way of pension valorisation from growth index of net remuneration referring to the Swiss index, which involved incorporating in 50% of consumer price growth index. The changes of the retirement age as well as the participation in the system demanded for early retirement were expected to be introduced gradually to 2009, the changes in the valorisation formula until 2001, while those referring to pension calculation and tax option to the year 2013. Moreover, the requirements of minimum participation period from (10 to 20 years) in the pension system was increased to obtain the guaranteed minimum pension[895]. Those employed before 1 July of 1998 had a chance of choosing whether to participate in the old or the new pension option. By the end of August 1999, those participating in the old pension system could make up their own decisions referring to their participation in the new one, and to the end of 2000 had the right to decide about the possible return to the old system. There were formal requirements for pension funds of the 2nd pillar: 1) the minimum of 2,000 participants, 2) the minimum of 25,000 participants in the fund which started to pay pension benefits out, 3) the reserve capital at HUF100 million. In 1998, the target level of the contribution transferred to the

891 Holzmann R. and Hinz R. et al. (2005), p. 151.

892 Żukowski M. (2006), p. 107.

893 Rocha R. and Vittas D. (2002), pp. 372-373.

894 In 2002 the retirement age for men reached the target level of 62; in 2005 the retirement age for women was 60, from 2007 it reached the level of 61; in 2009 it will reach the target level of 62. Cf: *National Strategy Report on Adequate and Sustainable Pensions: Hungary* (2005), p. 32.

895 *National Strategy Report on Adequate and Sustainable Pensions: Hungary* (2005), p. 9.

2nd pillar was changed from 8.0% to 6.0%[896], and the period of possible return to the old option was extended from 2000 to 2002[897]. In 1998, the pension security contribution accounted for 31% of the remuneration[898]. 36 pension funds of the 2nd pillar[899] existed by the end of 1998. Initially, the Hungarian Central Bank (*Magyar Nemzeti Bankra*, MNB) supervised functioning of the funds. On the grounds of the law[900] of 1999, the Governmental Office of Finance Control was established (*Pénzügyi Szeryezetek Állami Felügyelete*, PSZÁF)[901], whose goal was to take over the supervision of controlling the 2nd pillar. In 1999 the register of individual pension contributions of the 1st pillar[902] was introduced and the rule of indexing pensions was altered from the past index to the index of possible price and remuneration changes[903]. At the same time, the changes of pension contributions were made. The contributions were defined as 28% in 2001, 26% in 2002, and 26.5% in 2003[904]. Approximately one million people (that is 25% of those professionally active) were involved in the voluntary collective capital insurance scheme of the 3rd pillar by the end of 1999, while the number of the 3rd pillar pension funds decreased to 160[905], and even to 116[906] in 2000. In January 2001 an average pension amounted to HUF41,000 monthly[907]. Having consolidated the changes, 21 pension funds of the 2nd pillar[908] existed on the market[909]. In 2002 the retirement age for men was 62, and it was decided that the

896 Rocha R. and Vittas D. (2002), p. 366.
897 Rocha R. and Vittas D. (2002), p. 376.
898 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 75.
899 Gál R. I., Mogyorósy Z., Szende Á., Szivós P. (2003), p. 45.
900 1999. Évi CXXIV. *Törvény – a Pénzügyi Szervezetek Állami Felügyeletéről*.
901 http://www.pszaf.hu/, accessed 3 February 2008.
902 Gal R. I., Tarcali G. (2003), p. 3.
903 Gál R. I., Mogyorósy Z., Szende Á., Szivós P. (2003), p. 44.
904 Gál R. I., Mogyorósy Z., Szende Á., Szivós P. (2003), p. 44.
905 Rocha R. and Vittas D. (2002), p. 393.
906 Zoltan A. (2004), p. 9.
907 Gál R. I., Mogyorósy Z., Szende Á., Szivós P. (2003), p. 35.
908 Gál R. I., Mogyorósy Z., Szende Á., Szivós P. (2003), p. 45.
909 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 75.

amount of the pension contribution transferred to the 2nd pillar would be increased to 7.0% in 2003 and to 8.0% in 2004. In December 2002 those who had chosen the 2nd pillar had no longer the possibility of changing their decision. At the end of 2002, the minimum pension amounted to HUF20,100 monthly[910]. In 2003, the pension insurance contribution was 26.5% of the remuneration[911], whereas the average amount of the pension was HUF52,360 monthly, that was about 59% of the average remuneration[912]. By the end of 2003, there were 82 pension funds of the 3rd pillar[913]. In 2004 the amount of the pension growth was increased, due to postponed retirement, from 0.3% for each month to 0.5%[914]. At the same time, all tax allowances concerning payouts from the 1st and 2nd pillars were abolished[915]. Within the 3rd pillar, the amount of tax allowances was decreased from 50% of current funds to 30%, but not more than HUF100,000 annually[916]. In 2004 the budget subsidy was HUF186 billion[917]. In 2005 the minimal guaranteed pension was equal to HUF24,700 monthly[918], while on the market there were 75 pension funds of voluntary collective capital insurance[919]. Under the law of 2005[920], voluntary individual pension accounts were introduced in the banks, which constitute the 4th pillar in Hungary. The assets assembled in the bank accounts can be invested in listed securities. The assembled sums decrease the taxable base of income tax in 30% to the level of HUF100,000 annually and profits from capital investments are not taxable. In 2006 there were 18 pension funds of the 2nd pillar. Since 1 January of

910 Whitehouse E. (2007), p. 139.
911 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 75.
912 *National Strategy Report on Adequate and Sustainable Pensions: Hungary* (2005), p. 13.
913 Matits A. (2004), p. 9.
914 Żukowski M. (2006), p. 104.
915 Whitehouse E. (2007), p. 140.
916 *National Strategy Report on Adequate and Sustainable Pensions: Hungary* (2005), p. 9.
917 *National Strategy Report on Adequate and Sustainable Pensions: Hungary* (2005), p. 20.
918 Żukowski M. (2006), p. 105.
919 *National Strategy Report on Adequate and Sustainable Pensions: Hungary* (2005), p. 23.
920 2005.Évi CLVI. *Törvény a nyugdíj-előtakarékossági számlákról.*

2007, the farmers[921] have participated in the pension system. In 2007 the retirement contribution paid by the employer decreased to 17% of the remuneration[922].

### 2.12.3 The present state of the pension system in Hungary

Presently, the pension system in Hungary consists of four pillars: 1) the obligatory distribution system, 2) the obligatory capital insurance, 3) the voluntary collective capital insurance, 4) the voluntary individual pension bank accounts. The present state of the pension system in Hungary is presented in **Scheme no. 12**.

**Scheme no. 12**

**The present state of the pension system in Hungary**

| **1st pillar** | **2nd pillar** | **3rd pillar** | **4th pillar** |
|---|---|---|---|
| the obligatory distribution system | the obligatory capital insurance | the voluntary collective capital insurance | the voluntary individual pension bank accounts |
| managed by the Central Social Insurance Administration *Országos Nyugdijbiztositási Föigazgatóság,* ONYF | supervised by the Governmental Office of Finance Control *Pénzügyi Szeryezetek Állami Felügyelete,* PSZÁF | supervised by the Governmental Office of Finance Control *Pénzügyi Szeryezetek Állami Felügyelete,* PSZÁF | |

Source: Own elaboration.

**The obligatory distribution system** functions according to the pay-as-you-go rule and constitutes the 1st pillar, which is funded from the contributions complemented with state subsidies. The retirement age for

921 *National Strategy Report Social Protection and Social Inclusion: 2006-2008* (2006), p. 48.
922 Orbán G., Palotai D. (2005), p. 10.

men is 62[923], and for women 61[924]. The pension system is not expected to provide people with the possibility of early retirement, though there is the capability of obtaining the so-called pre-retirement benefit[925] three years before reaching the retirement age. The minimum period of insurance qualifying for a full pension is 20 years[926]. At least 15 years of participation in the system is required to be given the reduced pension. The insurance contribution amounts to 25.5% of the gross remuneration, of which 17.0% is paid by the employer and 8.5% is paid by the employee. In the case of employees, there is a level of maximum daily salary liable to paying the pension contribution. The top limit does not refer to employers[927]. In the case of the self-employed, the contribution is 25.5% of the declared monthly remuneration, without the top limit. The pension contribution written by the Tax and Finance Inspection Authority is distributed to the ONYF, and in the case of the participants of the 2nd pillar, the part of the contribution at a rate of 8% of the remuneration is transferred to the 2nd pillar. In the 1st pillar the retirement benefit depends on the income and the participation system program. After 10 years of participation in the system, the pension is at 33% of average remunerations. For each additional year of participation in the system, within the range of 11 and 25 years, the benefit grows by 2% for each year, within the range of 25 and 36 by 1%, and for each year between 36 and 40 years by 0.5%[928]. To calculate retirement benefit all years of the employment after 1987 are taken into account. After 40 years of participation, the pension ought to constitute 80% of the employee's average remuneration. The system anticipates functioning of the minimal guaranteed pension[929]. It is demanded that the contributions be paid at least for 20 years to get

923 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 32.
924 The retirement age for women increasing since 1999 has been 61 years of age since 2007, but in 2009 it will be 62.
925 Gál R. I., Mogyorósy Z., Szende Á., Szivós P. (2003), p. 22.
926 Żukowski M. (2006), p. 105.
927 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 141.
928 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 142.
929 In 2006 it was HUF25,800 after 20 years of employment.

such a pension[930]. Payouts are taxable according to the general rules, but the pensioners do not pay social security contributions[931]. The system is managed by the ONYF, at whose webpage there is access to the 1st pillar individual accounts – the so-called e-NYENYI[932].

**The obligatory capital insurance** is the 2nd pillar of the pension system. The contribution remitted to the 2nd pillar is established at 8% of the gross remuneration. The contributions are transferred to the pension funds, which invest them on capital markets. The funds can be close-end, that is limited to the employees of a specific enterprise or a sector of industry, or open-end, which means commonly available. 20 private pension funds of the 2nd pillar[933] are currently existing on the market. In the 2nd pillar the assembled resources can be paid out after reaching the retirement age in the form of annuities or in the form of one-time payout, which is possible providing that the period of contribution collection is not shorter than 180 months[934]. The PSZAF supervises the functioning of the 2nd pillar.

**The optional collective capital insurance** is the transfer of the pension contributions to the optional pension funds, which is responsible for the management of the accumulated assets. The contributions put to the 3rd pillar can be deducted from the taxable base of the individual income tax at a rate of 30% of current funds, but not more than HUF100,000 annually[935]. The pension payout is possible after 10 years of the participation in the fund; however, then it is taxable according to the general rules. The payout done after 20 years of the participation or after reaching the retirement age is not subject to the income taxation[936]. There are 70 optional pension

930 *National Strategy Report on Adequate and Sustainable Pensions: Hungary* (2005), p. 9.
931 Whitehouse E. (2007), p. 140.
932 http://www.onyf.hu/ , accessed 4 February 2008.
933 http://english.pszaf.hu/english/supinst/funds/dbpmagan.asp , accessed 4 February 2008.
934 Gál R. I., Mogyorósy Z., Szende Á., Szivós P. (2003), p. 22.
935 *Strategy Report on Adequate and Sustainable Pensions: Hungary* (2005), p. 9.
936 Horvath I., Zaupper B. (2004).

funds of the 3rd pillar on the market[937]. The functioning of the 3rd pillar is under the supervision of the PSZAF.

**The optional individual pension bank accounts** (NYESZs) constitute the 4th pension pillar in Hungary. The resources transferred to the accounts are invested in listed securities. The accumulated assets on the accounts decrease the taxable base of income tax in 30% to the level of HUF100,000 annually, and additionally, profits from capital investments are not taxable. Currently, 12 banks run this type of accounts with the guaranteed rate of return of 1.0% annually.

### 2.12.4 Challenges and planned changes in the pension system in Hungary

The demographic situation is the most significant challenge of the pension system to be faced in Hungary. According to predictions, in 2050, the relation index, measured as the proportion of the number of population at the age above 65 to 15-64 years, will amount to 48.3%[938]. The gradual increase in the women's retirement age to the level of 62 years will have been completed in 2009. The relatively low retirement age will still be a problem placing a direct burden on the public finance in the case of the 1st pillar. Another problem is the reduction of the value of the employment years during retirement benefit calculation. However, from 2013 the linear retirement calculation in the 1st pillar will come into force. The calculation will be made in equal value of 1.65% of average remunerations for each year of paying contributions, that is a replacement rate at 66% after 40 years of employment. In the case of people participating in the 2nd pillar, their pension in the 1st pillar will be calculated with the value of 1.22% of average remunerations for each year of paying contributions. In 2009 the pension contribution paid by the employer will be reduced to 16% of

[937] http://english.pszaf.hu/english/supinst/funds/dbpponkents.asp, accessed 4 February 2008.

[938] *National Strategy Report on Adequate and Sustainable Pensions: Hungary* (2005), p. 17.

the remuneration, and the total contribution will be equal to 24.5% of the remuneration[939]. In the same year, pension funds of the 2nd pillar will offer 3 various forms of the means placement: 1) classic, with a 5% portfolio share at the most, 2) balanced, with a 29% portfolio share at the most, 3) dynamic, with a 59% portfolio share at the most[940].

### 2.12.5 Summary

The pension system in Hungary underwent the significant reform in the1990s, which instituted the capital solutions – obligatory and optional. However, the low retirement age still exists in Hungary, preventing the 1st pillar from reaching financial stability. Another difficulty are the costs of the transformation. The functioning of the e-NYENYI providing access to individual pension accounts in the 1st pillar seems to be an interesting element of the pension system.

## 2.13 IRELAND

### 2.13.1 General information about the country

The Republic of Ireland[941] (*Poblacht na hÉireann*) is located in the north-western part of Europe, on the island of Ireland, which is bordered by the Irish Sea, the Celtic Sea, and the Atlantic Ocean. It consists of 4 provinces (*Cúigí*), which embrace 26 counties (*Contaetha*).

There are two official languages: Irish and English. The largest ethnic group were the Irish, who constituted 93.5% of the population and the main national minority were the British, who made up 3.6% of the population. The largest denomination was Roman Catholicism, whose members in Ireland constituted 88.4% of the population, and the second one was the Church of Ireland, whose number of adherents amounted to 3%.

According to the Constitution of 1937, the President of Ireland serves

939 Orbán G., Palotai D. (2005), p. 10.
940 Ottawa B. (2007a).
941 *Wielka Encyklopedia PWN* (2002), v. 12, pp. 250 and further.

as the head of state, and the Prime Minister is the head of government.

In 1973 Ireland joined the European Community, and in 1999 the Economic and Monetary Union and exchanged Irish pounds into the euro[942].

The current currency of Ireland is the euro.

The GDP *per capita* (PPP) was estimated at US$45,600 in 2007 and the GDP growth rate was recorded at 5.3%. The public debt accounted for 21.1% of the GDP. The current account balance showed a deficit of US$12.6 billion in 2007.

The unemployment rate was 5.0%.

In 2007 Ireland had a population of 4,109,086[943] with the following age structure: 0-14 years of age – 20.8%, 15-64 years of age – 67.5%, 65 years of age and over – 11.7%. Life expectancy at birth for total population was 77.90 years, for men – 75.27 years and for women – 80.70.

### 2.13.2 Historic development of the pension system in Ireland

The history of the Irish pension system began before Ireland gained the independence. The Trustee Act of 1893, which constituted the initial pension scheme, embraced only the workers of a private sector (occupational pension schemes)[944]. In 1897 the first legal regulation concerning accident insurance was adopted[945]. From **1908** a universal British pension law, based on financing pensions from the budget, was in force on those territories[946]. In 1911 the first regulations concerning

942 Irish pounds (IEP) were converted into the euro (EUR) at the exchange rate of IEP0.787564 per EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 31 March 2008.

943 https://www.cia.gov/library/publications/the-world-factbook/geos/ei.html, accessed 31March 2008.

944 *Ireland's National Strategy Report to the European Commission on Adequate and Sustainable Pensions* (2005), p. 39.

945 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 160.

946 Schulze I., Moran M. (2007a), p. 769.

health insurances[947] and unemployment insurances[948] were introduced. In 1921 public service pension schemes came into force[949]. After gaining the independence in 1935, pension rights were granted to surviving spouses and children[950]. In 1944 the first law concerning family allowances was introduced[951]. In the early 1950s the pension system referred only to full-time workers of a private sector[952]. In 1953 social insurance including pension insurances for mainly non-manual workers was introduced[953]. In 1961 the national contributory pension system was introduced. It consisted of three elements: 1) old-age contributory pension, 2) retirement pension and 3) survivor's pension. In 1961 the official retirement age was 70 years[954], and the contribution period required for the full pension was equal to 15 years[955]. In 1970 retirement pensions financed from contributions were introduced. They were to be a chance of early retirement from the age of 65 to 70[956]. In 1973 the Irish Association of Pension Funds (IAPF) was set up[957]. From 1973 to 1977, the retirement age required for the contributory pension was gradually decreased from 70 to 66[958]. By 1978 a fixed pay unrelated pension contribution had been in force. In 1979 the Pay-Related Social Insurance (PRSI) was introduced[959]. In 1987 additional voluntary contributions (AVCs) for public servants were introduced[960]. They were granted for those servants who had not earned the right to the full additional pension. According to the Social Welfare Act of 1988

947 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 158.
948 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 161.
949 Schulze I., Moran M. (2007a), p. 770.
950 Schulze I., Moran M. (2007a), p. 769.
951 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 162.
952 O'Donoghue C. (2005), p. 114.
953 *Green Paper on Pensions* (2007).
954 O'Donoghue C. (2005), p. 110.
955 Schulze I., Moran M. (2007a), p. 769.
956 *Ireland's National Strategy Report to the European Commission on Adequate and Sustainable Pensions* (2005), p. 42.
957 http://www.iapf.ie/AboutUs/, accessed 22 November 2007.
958 O'Donoghue C. (2005), p. 114.
959 *Green Paper on Pensions* (2007).
960 Connell P., Steward J. (2004), p. 141.

pension insurance started being mandatory for the self-employed and farmers[961]. In 1990 the Pension Act was adopted, which appointed the Pensions Board[962]. According to that act, all private occupational pension schemes, which obtained the Revenue Commissioners' authorization, were turned into capital schemes investing the contributions on capital markets[963]. At that time, it became possible to transfer money between occupational pension schemes after 5 years of participation in one of them[964]. In 1991 the pension insurance embraced part-time workers. In 1995 full pension insurance started being available for public service workers, who were employed after 6 April 1995[965]. In 1997 the average contribution period for the 1st pillar contributory pension was decreased from 20 to 10 weeks[966]. The Finance Act of 1999 allowed the self-employed to receive a single tax free fixed sum equal to 25% of accumulated pension contributions[967]. In 2000 the National Pension Reserve Fund, which started operating on 2 April 2001, was founded[968]. Its main task was to finance future expenses on pensions after 2025, by which time taking money out of the fund is not allowed. The fund was to be financed from the annual payments from the budget, which were to be equal to 1% of the Gross National Product (GNP) and were to be paid by 2055. The fund was to invest its assets on capital markets – 20% in bonds and 80% in shares. In 2001 an average pension was equal to €134 a week[969]. From 2002 the minimum contribution period required for the 1st pillar full retirement pension was raised from 152 to 260 weeks[970]. In 2002 it became possible to transfer contributions to the Personal Retirement Savings Accounts

961 Schulze I., Moran M. (2007a), p. 775.
962 Schulze I., Moran M. (2007a), p. 771.
963 Schulze I., Moran M. (2007a), p. 770.
964 Schulze I., Moran M. (2007a), p. 776.
965 *Green Paper on Pensions* (2007).
966 *Ireland's National Strategy Report to the European Commission on Adequate and Sustainable Pensions* (2005), p. 42.
967 Skinder M. (2004), p. 195.
968 Maher A. (2004), p. 127.
969 Skinder M. (2004), p. 200.
970 Schulze I., Moran M. (2007a), p. 773.

(PRSA), while maintaining the tax relief like in case of occupational pension schemes[971]. The minimum contribution period required for transferring money from one pension scheme to another one was reduced from 5 to 2 years[972]. In the same year the 1st pillar pension contribution was equal to 16%, out of which an employee paid 4% and an employer paid 12%. The 2nd pillar pension contribution amounted to about 10% of earnings[973]. In September 2003 the Office of the Pensions Ombudsman started operating[974]. In 2003 budgetary expenditures on the 1st pillar were estimated at €2,4billion[975]. In the first quarter of 2004 about 52% of the employed participated in the 2nd pillar of the pension system[976]. Within 2004 budgetary expenditures on occupational pension scheme of the public sector made up €1,7 billion[977], and the accumulated assets of the National Pension Reserve Fund were equal to €11,689 billion[978]. In 2005 the full retirement pension and contributory pension in the 1st pillar for living alone amounted to €179.30 a week[979]. In 2005 a new Social Welfare Act was adopted. It comprehensively regulated the pension system, health insurance, accident insurance, unemployment insurance and family allowances[980]. In March 2005, about 51,000 people participated in the PRSA[981], and at the end of that year the accumulated assets in

971 O'Donoghue C. (2005), p. 124.
972 Schulze I., Moran M. (2007a), p. 777.
973 *Pension Reform in Europe: Process and Progress* (2003), p. 34.
974 *Ireland's National Strategy Report to the European Commission on Adequate and Sustainable Pensions* (2005), p. 49.
975 *Ireland's National Strategy Report to the European Commission on Adequate and Sustainable Pensions* (2005), p. 35.
976 *Ireland's National Strategy Report to the European Commission on Adequate and Sustainable Pensions* (2005), p. 8.
977 *Ireland's National Strategy Report to the European Commission on Adequate and Sustainable Pensions* (2005), p. 34.
978 *Ireland's National Strategy Report to the European Commission on Adequate and Sustainable Pensions* (2005), p. 36.
979 Schulze I., Moran M. (2007a), p. 774.
980 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 156.
981 *Ireland's National Strategy Report to the European Commission on Adequate and Sustainable Pensions* (2005), p. 9.

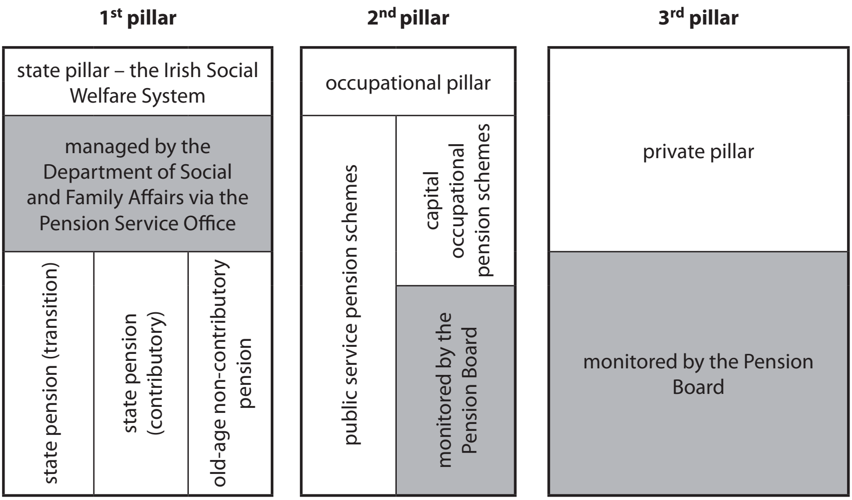
the 3rd pillar amounted to €451 million[982]. In 2006 the expenditures on the national pension system were equal to €3,279 million. Based on two reports of 2006 – *The National Pension Review* and *The Special Savings for Retirement* – *The Green Paper on Pensions* was published in October 2007. It stipulated the future of the Irish pension system by 2016 in the wake of the proposed reforms[983].

### 2.13.3 The present state of the pension system in Ireland

The Irish pension system consists of three pillars[984]: 1) state pillar, 2) occupational pillar, and 3) private pillar. The present state of the pension system in Ireland is presented in **Scheme no. 13**.

**Scheme no. 13**

**The present state of the pension system in Ireland**




Source: Own elaboration.

[982] http://www.ssa.gov/policy/docs/progdesc/intl_update/2006-02/2006-02.pdf, accessed 22 November 2007.
[983] *Green Paper on Pensions* (2007).
[984] Schulze I., Moran M. (2007a), p. 770.

**The state pillar,** called the Irish Social Welfare System, is obligatory and based on a pay-as-you-go rule. It contains three elements: a) state pension (transition) – earlier called a retirement pension, b) state pension (contributory) – earlier called the old-age contributory pension, c) old-age non-contributory pension[985]. The system embraces all the employed, whose weekly earnings exceed €38 and the self-employed whose annual earnings exceed €3,174. The pension contribution is paid by the employee and the employer. An employee pays the contribution equal to 4% of the remuneration exceeding €300 a week, until it reaches the annual level of €46,600. The employer pays 6.5% if the employee earns up to €356 a week, and 10.75% if he or she earns more than €356 a week. For the self-employed, the pension contribution is equal to 3% of the gross income if their annual net income is lower than €2,880, and 5% of the gross income if their annual net income is higher than €22,880[986]. The system does not stipulate the chance of an early retirement. Pensions are exempt from income taxes if they do not exceed €13,000 a year. Retired people do not pay social welfare contributions[987]. That pillar is managed by the Department of Social an Family Affairs, which administers the Social Insurance Fund. Within that department there is the Pension Service Office, which directly deals with the 1st pillar pension issues[988].

**State pension (transition)** applies to those who retire at the age of 65. The insurance contract should be concluded before the age of 55. The pension refers to full-time workers who have paid at least 260 full contributions[989]. The full pension applies to people who paid pension contributions during their professional career on average for 48 weeks whiting each year[990] and who have not received a remuneration for at least

985 *Green Paper on Pensions* (2007).
986 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 156.
987 Whitehouse E. (2007), p. 84.
988 Schulze I., Moran M. (2007a), p. 771.
989 From 2012 the contribution period required for the state pension is going to be raised to 520 weeks. Cf: Schulze I., Moran M. (2007a), p. 773.
990 Whitehouse E. (2007), p. 83.

a year[991]. It equals to €209,30 a week. It is also possible to be entitled to the pension when contributions were paid on average 24 weeks a year but its value is reduced to €205 a week[992]. Pension benefits are also transferred abroad. In practice, such a pension is received for 1 year due to the fact that when a certain person is at the age of 66, he or she is entitled to a state pension (contributory)[993]. It was reasonable in 1970 when it was introduced and the retirement age was 70.

**State pension (contributory)** applies to those who retire only after meeting certain contributory requirements. In order to receive a state pension (contributory), it is necessary to pay a certain number of pay-related social insurance contributions (the PRSI) before the age of 56. Within the scheme there are plenty of insurance classes, which are designated with the following letters: A, B, C, D, E, F, G, H, N and S. Most participants pay Class A social insurance contributions, which embraces people earning more than €38 a week. Class S applies to self-employed people. In order to qualify for this pension a certain person must be aged 66[994]. In order to receive the full pension, an average of 48 pension contributions a year is required. The pension is payable for 53 weeks a year[995], and equals to €209,30 a week[996]. It is also possible to qualify for the pension after paying a yearly average of 10 appropriate contributions but its value will be properly reduced.

**State pension (non-contributory)** applies to people who retire without being entitled to state pension (contributory) and who are subject to a means test. The pension is payable to the habitual residents of Ireland who are over 66[997]. The value of the pension is related to the income of a certain person including his or her spouse's income. The full pension for a lone person, who does not receive any other income, is equal to €200 a

991 Schulze I., Moran M. (2007a), p. 773.
992 *Green Paper on Pensions* (2007).
993 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 156.
994 O'Donoghue C. (2005), p. 110.
995 Whitehouse E. (2007), s. 83.
996 *Green Paper on Pensions* (2007).
997 Schulze I., Moran M. (2007a), p. 774.

week[998]. Within this scheme, a retired person receives additional benefits in the form of a free travel pass, electricity allowance, gas allowance, free television license allowance and telephone allowance.

**The occupational pillar** is voluntary and may be based on the capital or the repartition rule. It consists of two elements: a) public service pension schemes and b) capital occupational pension schemes. Almost 50% of the employed take advantage of the additional pensions[999]. The average retirement age is 65 but in some schemes it varies from 60 to 70[1000]. The assets accumulated in the 2nd pillar are subject to taxation on the EET basis[1001]

**Public service pension schemes** are based on a defined benefit rule. In case of the police officers and soldiers, the early retirement is possible at the age of 50 and in the case of teachers – at the age of 55. Pensions within this scheme are paid out from the current government funds, without the necessity of accumulating contributions.

**Capital occupational pension schemes** apply to private sector workers and are completely voluntary capital schemes. Within those schemes it is possible to determine whether a contribution should be paid by both the employer and the employee or only by an employer. Despite their capital character, the schemes may be based on a defined contribution (DC) or a defined benefit (DB) but the DB schemes constitute about 69%[1002]. As far as the DB schemes are concerned, the value of a benefit is related to the value of the last remuneration, where the contribution is fixed and amounts to 11-12% of earnings. As for the DC schemes, the pension is related to the value of accumulated contributions and capital investments effects. An average contribution within such schemes is estimated at 9-10%

[998] *Green Paper on Pensions* (2007).
[999] Skinder M. (2004), p. 211.
[1000] Schulze I., Moran M. (2007a), p. 774.
[1001] It means they are exempt from contribution tax and investment income tax but subject to taxation in the case of pension payout.
[1002] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 48.

of a remuneration[1003]. The schemes may be implemented as Retirement Annuity Contracts (RACs). Pension contribution within this plan are subject to tax relief, which is in relation to the participant's age. For people under the age of 30, the pension contributions make up 15% of earnings, for those between the ages of 30 and 39 they make up 20% of earnings, for those between the ages of 40 and 49 they make up 25% of earnings, for those between the ages of 50 and 54 they make up 30% of earnings, for those between the ages of 55 and 59 they make up 35%, and for those aged 60 and older they make up 40% of earnings[1004]. The tax relief applies to earnings which do not exceed the level of €262,382 a year. Occupational schemes are monitored by the Pension Board[1005].

**Private pensions** apply especially to the self-employed and are completely voluntary. Pension contributions within this scheme are subject to tax relief which is in relation to the participant's age. For people under the age of 30 the pension contributions make up 15% of earnings, for those between the ages of 30 and 39 they make up 20% of earnings, for those between the ages of 40 and 49 they make up 25% of earnings and for those aged 50 and older they make up 30% of earnings[1006]. Private pensions are operated in the form of Personal Retirement Savings Accounts (PRSAs). They may start being paid out between the ages of 60 and 75 of a participant. Private pensions are also monitored by the Pension Board.

### 2.13.4 Challenges and planned changes in the pension system in Ireland

The ageing of the society is the major problem Ireland has to face. In spite of a very positive image of Ireland in this area, compared to the other EU countries, the number of people at the age of 70 or older will reach

[1003] Skinder M. (2004), p. 199.
[1004] *Green Paper on Pensions* (2007).
[1005] Schulze I., Moran M. (2007a), p. 771.
[1006] http://www.ssa.gov/policy/docs/progdesc/intl_update/2006-02/2006-02.pdf, accessed on 22 November 2007.

the level of 19.9% in 2050[1007], and in 2056 there will be two active persons per each retired person[1008]. In order to prevent such a situation, since 2001 Ireland has been collecting assets in the National Pension Reserve Fund. According to the conclusions of the UE report of 2006[1009]:

- pensions in Ireland increased faster than prices and remunerations,
- the establishment of the reserve fund is very important for the stability of a pension system in future,
- compared to other countries, seldom early retirement, which is available only within certain schemes, is advantageous for Ireland.It seems as well that in future the number of the Irish participating in private pensions of the 3rd pillar will rise.

### 2.13.5 Summary

The Irish pension system seems to meet more and more effectively the need for providing means of subsistence for the retired people[1010]. The combination of the state pension and the fairly common in Ireland occupational pension, lately supplemented also with private pensions constitutes a successful pension system conglomerate. The state pension based on a solution proposed by Beveridge is perceived as a form of a social benefit for older people. Occupational pensions and private pensions become an addition to this 'bread and butter'. A relatively favourable demographic situation and the establishment of the National Pension Reserve Fund together with an advantageous economic situation will hopefully ensure the stability of the Irish pension system in future. It is also worth noticing that Ireland is the home of a unique, in Europe, institution of the Office of the Pensions Ombudsman[1011].

[1007] Pestieau P. (2003), p. 107.
[1008] Skinder M. (2004), s. 208.
[1009] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 51.
[1010] From 2004 to 2007 the number of the retired people exposed to poverty declined from 33% to 20%. Cf: http://www.globalaging.org/pension/world/2007/failure.htm, accessed on 23 November 2007.
[1011] http://www.pensionsombudsman.ie/, accessed on 23 November 2007.

## 2.14 ITALY

### 2.14.1 General information about the country

The Italian Republic[1012] (*Repubblica Italiana*) is a country situated in southern Europe in the Apennine Peninsula as well as on the islands of Sicily and Sardinia in the Mediterranean Sea and in the Liguria, Tyrrhenian, Ionic and Adriatic Seas. Italy comprises 20 regions (*regioni*).

The national language is Italian. The largest ethnic group were Italians (96% of the population). The largest minority were the Sardinians (about 2.2%). The largest religious group were the Catholics, 90% of the population, and the remaining 10% constituted the most numerous Protestants, Judaists and Muslims.

According to the Constitution, the head of the state is the President and the country is led by the Prime Minister.

In 1949 Italy joined the NATO Treaty, and in 1957 the European Economic Community. In 1999 Italy joined The European Economic and Monetary Union (EMU), changing Italian liras to the euro[1013].

The current Italian currency is the euro.

The GDP *per capita* (PPP) was estimated in 2007 at US$31,000, the growth rate of the GDP at 1.9%, and the public debt was 105.6% of the GDP. The current national balance at the end of 2007 showed the deficit of US$57.94 billion.

The unemployment rate was 6.7%.

In July 2007, the population of Italy was 58,147,733 people[1014] with the following age groups: 0-14 years old – 13.8%, 15-64 years old – 66.4%, 65 years old and older – 19.9%. The overall life expectancy at birth was 79.94 years: 77.01 for men and 83.07 for women.

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1012 *Wielka Encyklopedia PWN* (2005), v. 29, pp. 412 and further.

1013 Italian liras (ITL) were converted into the euro (EUR) at the exchange rate of ITL1.936,27 for EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 24 February 2008.

1014 https://www.cia.gov/library/publications/the-world-factbook/geos/it.html, accessed 31March 2008.

### 2.14.2 Historic development of the pension system in Italy

The beginning of the Italian retirement system dates back to 1898, when the first voluntary pension plan for private sector workers was established[1015]. It dealt with the Pension Fund of Hired Workers (*Fondo Pensioni Lavoratori Dipendenti*, FPLD), managed by the National Insurance Fund on Disability and the Old Age (*Cassa nazionale di previdenza per l'invalidità e la vecchiaia*)[1016] established at that time. In the same year the first legal regulation on accident insurance was adopted[1017]. In **1919** when the number of the retired amounted to about 20,000, the retirement plan became mandatory[1018]. This plan invested in the financial and property markets and was financed by the premiums which were subsidized from the budget. In the same year the first legal regulation on unemployment came into effect[1019]. In 1933 the National Insurance Fund on Disability and the Old Age was transformed into the National Institute of Social Insurance (*Istituto Nazionale della Previdenza Sociale*, INPS)[1020]. In 1937 the first legal regulation on family benefits was adopted[1021]. In 1939 the retirement age for men was set at 60 and for women at 55. In 1942 family benefits for the families of the deceased pensioners were introduced and in 1943 – health insurance[1022]. During World War II the means of the pension fund were used to finance budget expenses, so from 1947 the system worked within a mixed formula – partly as a capital fund, and partly as a pay-as-you-go[1023] system. In 1952 it started acting formally on pay-as-you-go[1024] principles. Then the minimum guaranteed pension was introduced[1025]. In 1955 a regulation

[1015] Franco D. (2002), s. 213.
[1016] http://www.inps.it/home/default.asp?iIDLink=2, accessed 12 February 2008.
[1017] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 177.
[1018] The mandatory nature of the scheme increased the number of contributors from 0.7 million to over 12.0 million. Cf.: Kołodziejczyk K. (2004), p. 326.
[1019] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 178.
[1020] http://www.inps.it/home/default.asp?iIDLink=2, accessed 12 February 2008.
[1021] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 179.
[1022] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 175.
[1023] Ferrera M., Jessoula M. (2007), p. 415.
[1024] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 172.
[1025] Kołodziejczyk K. (2004), p. 326.

concerning family benefits was revised[1026]. In 1956 pensions for a sufficient period of employment for public sector workers were introduced; they were entitled to retirement after working for 25 years in the case of men and 20 years in the case of women[1027]. In 1957 a separate retirement plan for farmers was introduced and in 1959 – for craftsmen[1028]. These plans were managed by the INPS[1029]. In 1960 the retirement expenditure amounted to 5% of the GDP[1030]. In 1965 pensions for a sufficient period of employment for the self-employed and for private sector workers were introduced. These workers were able to retire after working for 35 years[1031], and the retirement age for the self-employed was set at 65[1032]. In the same year the law on accident insurance was revised[1033]. In 1966 a separate pension plan for shop-keepers was introduced and it was also managed by the INPS. In 1968 the maximum rate of income on which pension premiums were to be paid was defined. Since previously these calculations were based on the amount of premiums, in 1969 the formula of calculation of pensions for the self-employed was changed. The new calculations were based on the rate of income. In 1971 the indexation of the granted pensions began. The indexation was implemented by adding the same amount to each pension. In 1973 the sufficient pension eligibility period was decreased to 20 years of employment for public sector workers in the case of men and to 15 – in the case of women. There was also a possibility for company-based funds for civil servants (*Indennità di buonuscita*)[1034], which functioned on the similar principles as the TFR in the private sector. In 1975, about 12.4 million[1035] people were entitled to receiving pensions. In the same year the law on unemployment

[1026] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 179.
[1027] Ferrera M., Jessoula M. (2007), p. 416.
[1028] Ferrera M., Jessoula M. (2007), p. 416.
[1029] Franco D. (2002), p. 213.
[1030] Franco D., Sartor N. (2006), p. 468.
[1031] Kołodziejczyk K. (2004), p. 327.
[1032] Belloni M., Borella M., Fornero E. (2005), p. 189.
[1033] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 177.
[1034] http://www.unina.it/personale/pensioni/indennitaBuonuscita.jsp, accessed 14 February 2008.
[1035] Brugiavini A., Peracchi F. (2004), p. 347.

was revised[1036]. In 1976 pensions were indexed by a rise co-efficient of gross remuneration. In 1979 first voluntary company-based pension plans were set up. In 1984 the indexation mechanism was changed into percentage indexation of pensions in proportion to the remuneration rise index. In 1988 the maximum rate of taxable income was cancelled on which pension contributions were to be paid. In 1991 pension contributions to be paid to the FPLD constituted 24.51% of the remuneration; the contribution paid by the employer was 17.36% of the remuneration, and the employee paid 7.15% of the remuneration[1037]. The replacement rates of public pensions at that time were at the level of about 80%[1038]. The process of the reform of the Italian pension system (known as 'Amato Reform') began in 1992[1039]. As a result of the reform, pension expenditure constituted 14.9% of the GDP[1040]. The basic principles of the reform, which should be only considered as parametric one, were the following[1041]: 1) gradual increase of the retirement age in the private sector from 60 to 65 for men and from 55 to 60 for women, 2) the extension of the period taken into account when calculating the pension from 5 to 10 years[1042], and in the case of those who in 1992 had fewer than 15 years of sufficient period of employment, even in proportion to the whole period of employment. In this case, the remuneration for the previous years was valorised by an index of the rise of the costs of living, 3) gradual extension of the period required to be eligible for pension due to the sufficient period of employment in the private sector from 15 to 20 years, 4) a change of the principles of valorisation of pensions: instead of the rise of remuneration index the co-efficient of an increase in prices was decisive, 5) gradual extension of the period required to be eligible for the pension due to the sufficient period of employment in the public sector from 25 years in the case of men and 20 years in the case of women to 35 years

[1036] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 178.
[1037] Brugiavini A., Peracchi F. (2004), p. 348.
[1038] Kołodziejczyk K. (2004), p. 327.
[1039] Della legge 23 ottobre 1992, n. 421 and Il decreto legislativo n. 503 del 30 dicembre 1992.
[1040] Franco D. (2002), p. 216.
[1041] Schludi M. (2005), p. 112.
[1042] In the case of civil servants, only the amount of their last remuneration was taken into consideration while calculating pensions before.

of employment for both sexes. In 1992 retirement contributions to the FPLD constituted 27.17% of the remuneration; 18.83% of the remuneration contribution was paid by the employer and 8.34% by the employee[1043]. In 1993 the legal regulation was implemented[1044] which allowed for the consolidation of the contributions according to the formula – the so-called *Trattamento di fine rapporto* (TFR) for purposes of quasi-retirement contributions which were paid as the severance pay when the employees were made redundant[1045]. Annual contributions for this retirement plan constituted 7.41% of the remuneration, were part of the income costs of the employer, remained at his disposal and (in case of a dismissal) were to be paid to the employee as a single payment without any tax concessions. Still, not a single company-based retirement plan was set up on the basis of this regulation[1046]. In 1994, when the two institutions: the National Institution of Social Insurance and State Workers' Security Fund (*Ente Nazionale Previdenza e Assistenza dipendenti Statali*, ENPAS) merged into the National Institute of Social Insurance for Civil Servants (*Istituto Nazionale di Previdenza per i Dipendenti dell'Amministrazione Pubblica*, INPDAP)[1047], the latter started managing two retirement funds – one for state civil servants and the other one for local civil servants. In 1995 average social insurance contributions were unified for the private sector at the level of 44% of the remuneration[1048]. The following reform of 1995 (known as the 'Dini Reform')[1049] possessed the features of a systemic reform. The essential constituents of this reform were as follows[1050]: 1) pension contributions were a part of social insurance premiums, 2) introduction of the individual pension contribution record known as notionally defined contribution (NDC), 3) pension rate was dependent on the amount of contributions, which were to be indexed by a current index of the average increase of the GDP of the last five

[1043] Brugiavini A., Peracchi F. (2004), p. 348.
[1044] Il decreto legislativo n. 124 del 21.04.1993.
[1045] Marano A., Sestito P. (2005), p. 145.
[1046] Kołodziejczyk K. (2004), p. 330.
[1047] Ferrera M., Jessoula M. (2007), p. 418.
[1048] Franco D. (2002), p. 216.
[1049] L. 8 agosto 1995, n. 335 (1). *Riforma del sistema pensionistico obbligatorio e complementare*.
[1050] Schludi M. (2005), p. 116.

years, 4) gradual increase of the sufficient period of employment from 35 to 40 years, which allowed pension eligibility, 5) introduction of the random retirement age within the 57 to 65 age bracket[1051], to calculate the rate of pension the amount of consolidated pension contributions was divided by life expectancy after the retirement, 6) a decrease of the minimum required sufficient period of employment to 5 years, which allowed for eligibility for the base pension with the simultaneous cancellation of the base level pension, 7) the replacement of the social pension (*pensione sociale*) by the social cheque (*assegno sociale*)[1052]. Tax concessions were also extended in the 2nd pillar – contributions at the level of 2% of annual income of €1,291 decreased the tax base. The new principles did not concern those who had at least 18 years of sufficient period of employment in the pension plan of 1995. They were covered by the principles of granting pensions before the reform of 1992. Those whose sufficient period of employment was shorter were covered by the same reform. Moreover, the new principles concerned only the contributions paid after 1995. In 1996 a revised regulation on company-based retirement came into effect which allowed for setting up company-based and subsidiary pension funds[1053]. The Audit Pension Funds Commission (*Commissione di Vigilanza sui Fondi Pensione*, COVIP)[1054] was established which was to control the newly set up retirement plans. The first pension fund based on this scheme started its activity in 1997[1055]. The following reform of 1997 (known as the 'Prodi Reform')[1056] resulted in the subsequent salient changes in the system[1057]: 1) gradual increase in the contribution rate for the self-employed up to 19% of the income and 2) automatic indexation of the pensions which exceeded the level of ITL3.5 million was suspended. In 1998 the COVIP registered the first pension fund in the 2nd pillar[1058].

[1051] Gronchi S., Nisticò S. (2006), p. 498.
[1052] Ferrera M., Jessoula M. (2007), p. 428.
[1053] Pursuant to the law of 1993: Il decreto legislativo n. 124 del 21.04.1993.
[1054] http://www.covip.it/homepage.htm, accessed 16 February 2008.
[1055] Marano A., Sestito P. (2005), p. 152.
[1056] Legge 27 dicembre 1997, n. 449 *Misure per la stabilizzazione della finanza pubblica.*
[1057] Schludi M., (2005), p. 120.
[1058] It was the pharmaceutical fund, whose acronym was: the FONCHIM, and the full name: Associazione Fondo Pensione Complementare a Capitalizzazione per i Lavoratori

Pension contributions in the FPLD rated at 33.00% of the remuneration; 24.11% of the remuneration was paid by the employer and 8.89% – by the employee[1059]. On 8 June 1999, the Association for the Development of Pension Funds Market (*società per lo sviluppo del mercato dei fondi pensione*, MEFOP S.p.A.)[1060] began its activity. In 1999, 17.8 million people received pensions[1061]. On 1 January 2000, the retirement age was set at 65 for men and 60 for women. In 2000 social insurance contributions under the general system constituted 45% of the remuneration. With the contribution within the plan for craftsmen it rated at 21.3% and for shop keepers – at 18.5% of the income[1062]. According to the old system, from 1 January 2001, the minimum insurance period which allowed for pension eligibility was set at 20 years. In 2001 a new possibility of consolidating pension savings in insurance companies (*Piani Individuali Pensionistici*, PIPs) was implemented. In 2002 pension contributions in the general system comprised 32.7% of remuneration; 23.8% was paid by the employer[1063], and 8.9% – by the employee. In 2004 another reform of the pension system (known as the 'Berlusconi Reform')[1064] was implemented, whose principles came into effect at the beginning of 2008[1065]. The reform concerned[1066]: 1) the incitement for later retirement for the participants of the old pension plans, 2) the introduction of the required period of employment of 35 years to be eligible for pension under the new plan for those who wanted to retire earlier than at the age of 65 in the case of men and at the age of 60 in the case of women, 3) the increase of the minimum early retirement age under the new plan to 60 in 2008 and to 62 in the years to come. In 2005 there were 43 closed pension funds which were managed by social partners, and 89 open

dell'industria Chimica e Farmaceutica e dei Settori Affini. Cf.: http://www.covip.it/ALBO.ASP, accessed 16 February 2008.

1059 Brugiavini A., Peracchi F. (2004), p. 349.

1060 http://www.mefop.it/chisiamo.php?page=1, accessed 16 February 2008.

1061 Brugiavini A., Peracchi F. (2004), p. 347.

1062 Franco D. (2002), p. 226.

1063 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 33.

1064 Legge n. 243/2004 *di riforma del sistema pensionistico*.

1065 http://www.inps.it/home/default.asp?iIDLink=2, accessed 12 February 2008.

1066 Marano A., Sestito P. (2005), p. 161.

pension funds, managed by external financial institutions[1067]. At the end of 2006 about 2.0 million people were covered by occupational and company-based pension plans[1068]. In July 2007 an automatic principle of transferring means consolidated in the TFR to private pension plans in the case of absenteeism from work was implemented[1069]. Under such circumstances the formula of silent assent was applicable which meant that, if the employee was not opposed to it, default means were transferred to an external pension fund[1070]. Besides, on 1 July 2007, the law was put into effect which allowed after the assent of an employee the transfer of means consolidated in the TFR to an individual or occupational pension fund chosen by him. The ban was introduced on the TFR in those companies that employed more than 50 people. The employers of such companies were to transfer pension contributions to selected occupational funds. In October 2007 the principles of the increase of the minimum retirement age were changed and it was set at 58 in 2008 with gradual increase up to 60 in 2011. Additionally, the required sufficient period of employment for early retirement eligibility was increased from 35 to 36 years[1071].

### 2.14.3 The present state of the pension system in Italy

Currently the pension system in Italy contains four basic elements[1072]: A) the general pension plan for the hired workers, B) the pension plan for the self-employed, C) the pension plan for civil servants and D) pension plans for selected occupational groups. There also functions the so-called social cheque (*assegno sociale*) for all those who turned 65 and whose pension plans do not provide sufficient means to live on[1073]. The present state of the pension system in Italy is presented in **Scheme no. 14**.

[1067] *The Handbook of Western European Pension Politics* (2007), p. 880.
[1068] Ottawa B. (2007b).
[1069] *Joint Report on Social Protection and Social Inclusion 2007. Social Inclusion, Pensions, Healthcare and Long Term Care* (2007), p. 260.
[1070] Ferrera M., Jessoula M. (2007), p. 429.
[1071] *Italian govt okays retirement plans* (2007).
[1072] Schludi M. (2005), p. 109.
[1073] In 2004 it amounted to €367 monthly. Cf.: *The Handbook of Western European Pension Politics* (2007), p. 881.

**Scheme no. 14**

**The present state of the pension system in Italy**

**element A**

| | | | |
|---|---|---|---|
| the general pension plan for the hired workers Assicurazione Generale Obbligatoria, AGO | 1st pillar | the obligatory public system | the system functioned before 1993 – the defined benefit (DB); the new retirement system – notionally defined contributions (NDC) — the audit on the payments is conducted by the Unit of Expenditure Estimation on Social Insurance *Nucleo di Valutazione della Spesa Previdenziale*, NVSP |
| | 2nd pillar | the company-based and open pension funds | company-based retirement plans which were set up before 1993 |
| | | | company-based funds *Trattamento di fine rapporto* TFR |
| | | | company-based funds for civil servants *Indennità di buonuscita* |
| | | | company-based and occupational open pension funds — supervised by the Audit Pension Funds Commission *Commissione di Vigilanza sui Fondi Pensione*, COVIP |
| | 3rd pillar | | the individual pension plans *Piani Individuali Pensionistici*, PIP |

**element B**

| | | | |
|---|---|---|---|
| the pension plan for the self-employed | craftsmen | the Board of Craftsmen *Gestione degli artigiani* | managed by the National Institute of Social Insurance *Istituto Nazionale della Previdenza Sociale*, INPS |
| | shopkeepers | the Board of Trade Representatives *Gestione degli esercenti attività commerciali* | |
| | farmers | the Board of Farmers, Leaseholders and Tenants *Gestione coltivatori diretti, mezzadri e coloni* | |
| | professionals | | |

**element C**

| | |
|---|---|
| the pension plan for civil servants | managed by the National Institute of Social Insurance for Civil Servants *Istituto Nazionale di Previdenza per i Dipendenti dell'Amministrazione Pubblica*, INPDAP |

**element D**

| |
|---|
| pension plans for selected occupational groups |

Source: Own elaboration.

**A. The general pension plan for the hired workers** (*Assicurazione Generale Obbligatoria*, AGO) consists of three pillars 1) the obligatory public system – 1st pillar, 2) the company-based and open pension funds – 2nd pillar and 3) the individual pension plans – 3rd pillar. Pension contributions are paid 13 times a year with an additional contribution in December[1074].

**The obligatory public system** incorporates two basic solutions which result from changes in the law in the following periods: a) the system which functioned before 1993 and b) the new retirement system. The system covers those who on 31 December 1995 had at least 18 years of sufficient period of employment[1075]. Employees whose sufficient period of employment on 31 December 1995 was fewer than 18 years are covered by the old and the new systems proportionally to the sufficient period of employment before and after this date[1076]. The audit on the payments from the 1st pillar is conducted by the Unit of Expenditure Estimation on Social Insurance (*Nucleo di Valutazione della Spesa Previdenziale*, NVSP) functioning in the structure of the Ministry for Labour and Social Insurance (*Ministero del Lavoro e delle Previdenza Sociale*)[1077].

**The system before 1993** was regulated by the principle of the defined benefit and the retirement age was set at 65 for men and 60 for women. To be eligible for a full pension (*pensioni di vecchiaia*) the required period for coverage under this system is 40 years and the minimal period required for obtaining pension is set at 20 years of coverage under the pension plan. It is also possible to be entitled to earlier retirement (*pensioni di anzianita*) irrespective of age in case of having 40 years of sufficient period of employment. Early retirement is acquirable on reaching 60 by men and 58 by women on condition of being covered by the system for 36 years[1078].

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1074 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 173.

1075 *The Handbook of Western European Pension Politics* (2007), p. 880.

1076 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 53.

1077 http://www.lavoro.gov.it/Lavoro/md/AreeTematiche/previdenza/Uffici/nucleovalutazione.htm, accessed 13 February 2008.

1078 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 53.

There is a possibility of postponing the retirement for 5 years. The pension contribution comprises 32.7% of gross remuneration, of which 23.81% is paid by the employer and 8.89% by the employee[1079]. The amount of pension depends on the number of years of paying contribution and the average remuneration for the last 10 years. For each year of contribution payment the pension constitutes 2%, if annual remuneration is €36,093. If the level of remuneration is higher, the value of pension for each year is being gradually lowered up to 0.9% for each year of paying contributions at the level of annual income exceeding €68,577[1080]. Thus, if the level of income is lower, the replacement rate in the case of the full pension after 40 years of employment is 80%. The plan covers the minimum pension[1081]. Pensions are indexed by the index of the increase of the cost of living. Pensions are taxable[1082]. Pension contributions within the system are to be paid until 2035. This is the year of the termination of the system.

**The new pension system** is based upon the principle of the defined contribution, with notionally defined contributions (NDC), and the retirement age is flexible within the period from 58[1083] to 65 for both sexes[1084]. The minimum required period of coverage under the retirement plan for pension eligibility is 5 years. Early retirement under the age of 65 in the case of men and 60 in the case of women requires the sufficient period of employment of 36 years. In the case of hired workers pension contributions constitute 33.0% of the remuneration and are paid within the annual income span between €9,226 and €88,669[1085]. According to the law, 73% of the contribution is paid by the employer and 27% by the employee[1086]. Consolidated assets are valorised by the current index of

[1079] Żukowski M. (2006), p. 118.
[1080] Kołodziejczyk K. (2004), p. 334.
[1081] In 2006 for those aged over 70 it was €7.069 annually. Cf.: *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 53.
[1082] Whitehouse E. (2007), p. 87.
[1083] In the case of self-employed men, the minimum retirement age is 59.
[1084] Holzmann R., MacKellar L., Rutkowski M. (2003), p. 33.
[1085] http://www.inps.it/home/default.asp?sID=%3B0%3B4725%3B4726%3B4727%3B&lastMenu=4727&iMenu=1&iNodo=4727&lItem=4778, accessed 12 February 2008.
[1086] Gronchi S., Nisticò S. (2006), p. 502.

the average increase in the GDP from the last 5 years[1087]. The pension is calculated on the basis of the amount of the consolidated contributions divided by a number of retirement years actuarially calculated**.** Those who entered the job market after 31 December 1995 do not have the guarantee of the minimum pension. Pensions are indexed by the index of the increase of costs of living. Pensions are taxable.

**The system of company-based and open pension funds** consists of four elements: a) company-based retirement plans which were set up before 1993, b) company-based funds (TRF), c) company-based funds for civil servants (*Indennità di buonuscita*) and d) company-based and occupational open pension funds.

**The company-based pension funds** set up before 1993 function on the basis of the agreement between employers and employees on consolidating means for pensions. The principles of each of the agreements are regulated individually without any financial encouragement. There were 510 of this kind of funds on the market[1088].

**The obligatory company-based retirement plan (TRF)** functions as book-keeping records (in the books of the employer) only in those companies which employ up to 50 people. Pension contributions in this system comprise 6.91% of the remuneration. The payment is calculated as a proportion of 1/13.5 for every year of employment[1089]. The interest rate of 1.5% plus 0.75 of the index of the inflation growth[1090] is added to the consolidated means. The amount of the consolidated means within the system is paid as a single payment when the employee leaves either due to a job change or coming of retirement age. 11% of those employed are covered by this system[1091].

**The company-based pension plans for civil servants** (*Indennità di buonuscita*) function in the public sector on the same principles as the TFR in the private sector.

[1087] Marano A., Sestito P. (2005), p. 147.
[1088] Ferrera M., Jessoula M. (2007), p. 419.
[1089] Ferrera M., Jessoula M. (2007), p. 417.
[1090] Marano A., Sestito P. (2005), p. 145.
[1091] *Joint Report on Social Protection and Social Inclusion 2007. Social Inclusion, Pensions, Healthcare and Long Term Care* (2007), p. 260.

**Open company-based or occupational pension plans** function as external institutions with reference to the employers who are entrusted the management of the consolidated means. Contributions paid into these funds are obligatory for those who employ more than 50 people. These can be closed pension funds, managed by social partners or open pension funds, managed by external financial institutions[1092] such as banks, insurance companies, or companies dealing with asset management. There also functions a single fund (*FondInps*) managed by the INPS. There were 132 funds on the market, of which 40 were purchased by the MEFOP Association[1093]. Over 4.2 million people are covered by pension plans[1094]. Pension funds are supervised by the Commission on Pension Funds (COVIP). Only 87.5% of pension payments are taxable[1095].

**Individual pension plans** (PIPs) function in life insurance companies. They are completely voluntary and the contributions are paid on the basis of the participants' decisions. Pensions are taxable. Only 60% of the pension is taxable[1096].

**B. The retirement plan for the self-employed** covers the following occupational groups: 1) craftsmen, 2) shopkeepers, 3) farmers, 4) professionals. The plan is based on actuarially indexed premiums. The retirement age is set at 65 for men and 60 for women; the minimum required period of contribution for pension eligibility is 15 years. For craftsmen and shopkeepers, contributions are paid in the annual income range €13,598 to €66.805 and constitute for the craftsmen from 16.50% to 20.50% of the income[1097]. The contribution amount depends on the selected period of paying contributions and the rate of the income. In the case of the shopkeepers, the amount of contributions constitutes from

1092 Ferrera M., Jessoula M. (2007), p. 419.
1093 http://www.mefop.it/fondi.php, accessed 16 February 2008.
1094 Neilan Ch. (2008).
1095 Whitehouse E. (2007), p. 87.
1096 Whitehouse E. (2007), p. 87.
1097 http://www.inps.it/home/default.asp?sID=%3B0%3B4725%3B4726%3B4728%3B&lastMenu=4728&iMenu=1&iNodo=4728&lItem=4778, accessed 12 February 2008.

16.59% to 20.59%, and is also dependent on the selected period of paying contributions and the level of income[1098]. Farmers pay contributions between 12.80% and 20.30% of the income, depending on the selected period of paying and the level of income[1099]. In the case of professionals, pension contributions are set at 24.72% and paid up to the level of €87,187 annually[1100]. The plan is managed by the INPS with separate boards for certain occupational groups[1101]: the Board of Craftsmen (*Gestione degli artigiani*), the Board of Trade Representatives (*Gestione degli esercenti attività commerciali*) and the Board of Farmers, Leaseholders and Tenants (*Gestione coltivatori diretti, mezzadri e coloni*).

**C. The plan for civil servants** offers a full pension at the level of 80% of the remuneration after working for 40 years[1102] as a civil servant[1103]. The pension plan contributions are set at 7% of the remuneration. The retirement age is 65. After 35 years of service there is a possibility of early retirement at the age of 60[1104]. The plan is managed by the INPDAP[1105].

**D. The plan for selected occupational groups** refers to those who work for the system of justice, doctors, and teachers[1106].

[1098] http://www.inps.it/home/default.asp?sID=%3B0%3B4725%3B4728%3B4729%3B&lastMenu=4729&iMenu=1&iNodo=4729&lItem=4780, accessed 12 February 2008.

[1099] http://www.inps.it/home/default.asp?sID=%3B0%3B4725%3B4730%3B4731%3B&lastMenu=4731&iMenu=1&iNodo=4731&lItem=4782, accessed 12 February 2008.

[1100] http://www.inps.it/home/default.asp?sID=%3B0%3B4725%3B4729%3B4730%3B&lastMenu=4730&iMenu=1&iNodo=4730&lItem=4781, accessed 12 February 2008.

[1101] *The Handbook of Western European Pension Politics* (2007), p. 880.

[1102] http://www.inpdap.gov.it/webinternet/PrevObbligatoria/RequisitiAccessoAnzianita.asp, accessed 14 February 2008.

[1103] Schludi M. (2005), p. 110.

[1104] In 2010 early retirement will be possible at the age of 61, while in 2014 it will reach the target level of 62. Cf.: http://www.inpdap.gov.it/webinternet/PrevObbligatoria/RequisitiAccessoAnzianita.asp, accessed 14 February 2008.

[1105] Ferrera M., Jessoula M. (2007), p. 418.

[1106] Ferrera M., Jessoula M. (2007), p. 418.

### 2.14.4 Challenges and planned changes in the pension system in Italy

The main problem of the retirement system in Italy is the lack of consistency in the implementation of the systemic reform. Limiting the reform to funds consolidated after 1 January 1996 has been a major drain on public finance. The unfavourable demographic situation of Italy makes it especially notable. In 2030, the proportion rate between the people at their retirement age to the number of all those employed is expected to constitute 48%[1107], and pension expenditures will amount to 15-16% of the GDP[1108]. In 2040 the proportion rate of the number of people over 65 to the number of those aged between 15 and 64 is to constitute 60.1%[1109]. Another problem is the low retirement age. In 2013 the eligibility for early retirement will be possible for men at 61, but for women the retirement age, set at 58, will be sustained until 2015, on condition of participation in the plan for 36 years[1110].

### 2.14.5 Summary

The retirement system in Italy has undergone serious transformations recently. The most important is the reform of 1995, which was modelled on the Swedish legal regulation of 1994, which introduced the NDC solution in the 1st pillar. Italy was the first country in the world to implement the NDC system[1111]. Further changes in the 1st pillar are of the parametric character, which still remains the basic feature of the retirement system in Italy. At the same time, the 2nd pillar has been dynamically developing in the form of the occupational plans in recent years, despite the fact that it was neglected for decades.

It is worth mentioning that, in comparison with other pension systems at the international level, the implementation of the NDC system in the 1st pillar was a truly pioneering solution.

1107 Franco D. (2002), p. 211.
1108 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 33.
1109 Franco D., Sartor N. (2006), p. 467.
1110 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 53.
1111 Despite having followed the legislative procedure earlier than the Italians, the Swedes implemented their NDC system only in 1999.

## 2.15 LATVIA

### 2.15.1 General information about the country

The Republic of Latvia[1112] (*Latvijas Republika*) is the country situated in the North East of Europe on the Baltic sea, comprising 26 regions (*rajonas*) and 7 sectioned cities.

The official language is Latvian. The largest ethnic group were the Latvians, accounting for 57.7% of the population, while the largest minority were the Russians with 29.6%. The largest religious groups were the Lutherans, the Catholics, and the Orthodox.

Pursuant to the Constitution of 1922, the head of the state is the President, while the government is led by the Prime Minister.

In 2004 the Republic of Latvia became a member of the NATO (on 29 March) and the European Union (on 1 May).

The currency is the lat (LVL[1113], *lats*).

The GDP *per capita* (PPP) in 2007 was estimated at US$17,700, while the GDP growth rate stayed at 10.3%. The public debt amounted to 8.8% of the GDP. The current national balance at the end of 2007 showed the deficit of US$5.839 billion.

The unemployment rate reached 5.9%.

In July 2007 the population of Latvia was 2,259,810[1114] with the following age groups: 0-14 years of age – 13.6%, 15-64 years of age – 69.6%, 65 years of age and over – 16.7%. The average life expectancy at birth was 71.6, including men – 66.39 years of age, and women – 77.1.

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1112 *Wielka Encyklopedia PWN* (2003), v. 16, pp. 298 and further.

1113 According to the ISO 4217 standard. On 31 December 2007, EUR1 was worth LVL0.6964. Cf.: http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-lvl.en.html, accessed 19 February 2008.

1114 https://www.cia.gov/library/publications/the-world-factbook/geos/lg.html, accessed 31March 2008.

### 2.15.2 Historic development of the pension system in Latvia

The Latvian pension system dates back to **1922**, when the first universal pension system was established in this country[1115]. The law on health insurance was passed in 1924[1116]. 1927 was the year of the first legal regulation concerning accident insurance[1117]. The Soviet model, which was adopted in Latvia later, was based on Bismarck's solution with pensions being financed from the general budget. The contribution period qualifying for receiving a pension was different for both sexes, with 25 years for men and 20 for women[1118]. In the Soviet system the retirement age stayed at 60 for men and 55 for women. In 1990 the first regulation on family benefits was introduced[1119], and in 1991 the act on state pensions[1120] came into force and the regulation on unemployment emerged[1121]. In 1993 the State Tax Office (*Valsts ieņēmumu dienesta*, VID)[1122] was established, which administered pension contributions. In the same year, the first pension fund was set up by the rule of general law, however, it was unsuccessful on the market[1123]. In 1994 the State Social Security Fund (*Nodibināts Valsts sociālās apdrošināšanas fonds*, VSAF) was established, which took over management of resources collected for pensions[1124]. The reform of 1994 set the retirement age at 60 for both sexes[1125]. 1995 saw an amendment of law on health and accident insurance as well as family benefits[1126]. On 1 January 1996, a legal rule on basic mandatory pension scheme, i.e. the

1115 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 187.
1116 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 189.
1117 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 190.
1118 Leppik L., Kruuda R. (2003), p. 61.
1119 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 192.
1120 Kurowski P. (2006), p. 128.
1121 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 192.
1122 http://www.vid.gov.lv/default.aspx?hl=2, accessed 24 July 2007.
1123 Kurowski P. (2006), p. 200.
1124 http://www.vsaa.lv/vsaa/content/?lng=en&cat=745, accessed 24 July 2007.
1125 Palmer E., Stabiņa S., Svensson I., Vanovska I. (2006), p. 405.
1126 *Social Security Programs Throughout the World: Europe, 2006* (2006), pp. 189, 190 and 192.

1st pillar of the pension system[1127], was introduced, which raised the target retirement age to 62 for both sexes[1128]. The solution adopted stemmed from the feeling of generation solidarity by continuing the current pay-as-you-go rule; however, it was also the first in Europe application of the NDC system (non-financial or notional defined contribution)[1129]. The contribution was set at the level of 20% of remunerations. The new system covered all the employed aged over 15, including the self-employed and farmers. Pensions were indexed by the consumer price index[1130]. From 1 June 1997, the minimal pension value for women taking the early retirement was introduced along with the maximum pension value[1131]. In 1998 the State Social Security Fund was transformed into the State Social Security Agency (*Valsts sociālās apdrošināšanas aģentūra*, VSAA); concurrently, management of resources collected for pensions was passed to the State Tax Office[1132]. On 1 July 1998, the regulation on voluntary pension insurance was passed. It was then that the first four private pension funds[1133] were created, which was the beginning of the 3rd pillar[1134]. The supervisory body was the State Social Security Agency. 1999 was the year of the new law on unemployment insurance[1135]. In 2000, 7 thousand persons participated in voluntary pension funds, which accounted for less than 1% of those professionally active[1136]. On 1 July 2001, the law was passed on functioning of pension funds investing

1127 Bite I., Zagorskis V. (2003), p. 41.

1128 The seemingly radical decision to raise the retirement age was later modified; the retirement age increase started on 1 July 2000, with a 6-month rise on every 1 July. The target retirement age for men was reached in 2003, while for women it is planned to be reached on 1 July 2008. Cf.: Bite I., Zagorskis V. (2003), p. 51.

1129 Palmer E., Stabiņa S., Svensson I., Vanovska I. (2006), p. 397.

1130 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 62.

1131 Bite I., Zagorskis V. (2003), p. 41.

1132 http://www.vsaa.lv/vsaa/content/?lng=en&cat=745, accessed 24 July 2007.

1133 These were the funds of two insurance companies: Parrekss and Baltikums, and two banks: Hansabanka and Rietumu banka.

1134 Bite I., Zagorskis V. (2003), p. 39.

1135 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 192.

1136 Kurowski P. (2006), p. 200.

on capital markets, which marked the beginning of the 2nd pillar in Latvia[1137]. This pillar became mandatory for all the employed below the age of 30, while those aged 30-49 were allowed to choose whether to participate in the new system or the old one[1138]. The 2nd pillar, of the capital nature in principle, during the transition period, i.e. till the end of 2006, was supposed to be administered by the State Social Security Agency in the form of the Central Depository Body, which could only invest in state bonds[1139]. Contributions to the 2nd pillar equalled to 2% of remuneration[1140]. In the same year 2001, the Financial and Capital Market Commission (*Finanšu un kapitāla tirgus komisija*, FKTK) was appointed, which took over supervising investment companies which served the 2nd and 3rd pillar pension funds[1141]. In 2002 contribution amounted to 27.5%, 7.5% of which was allocated to finance the debt of the old pension system[1142]. Also in 2002, the rule of indexing pensions with consumer price index was altered to indexation with a mixed index of consumer prices and remuneration increase[1143]. From January 2003, it was possible to select the institution managing resources collected in the 2nd pillar: either the state treasury or private companies[1144]. In 2003 there were more than 26 thousand participants in voluntary pension funds, i.e. the 3rd pillar, and more than 495 thousand in universal capital plans, i.e. 2nd pillar[1145]. The year 2007 marked the beginning of an increase in the part of pension contribution transferred to the 2nd pillar[1146].

[1137] Bite I., Zagorskis V. (2003), p. 39.
[1138] In this age group, only 5% declared participation in the 2nd pillar. Cf.: Bite I., Zagorskis V. (2003), p. 44.
[1139] Bite I., Zagorskis V. (2003), p. 45.
[1140] Holzmann R. and Hinz R. et al.(2005), p. 152.
[1141] http://www.fktk.lv/eng/, accessed 25 July 2007.
[1142] Holzmann R., MacKellar L., Rutkowski M. (2003), p. 35.
[1143] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 62.
[1144] *Latvian National Report on Adequate and Sustainable Pensions* (2005), p. 25.
[1145] Kurowski P. (2006), p. 201.
[1146] Until 2006 this contribution amounted to 2%, and its target level for 2010 is 10%. Cf.: Kurowski P. (2006), p. 129.

### 2.15.3 The present state of the pension system in Latvia

The Latvian pension system comprises three pillars[1147]: 1) basic mandatory scheme following the pay-as-you-go rule, i.e. the 1st pillar, 2) additional mandatory pension scheme, following capital rules, i.e. the 2nd pillar, and 3) additional voluntary pension scheme, i.e. the 3rd pillar. Apart from this, there are autonomous systems for prosecutors, policemen and soldiers[1148]. The present state of the pension system in Latvia is presented in **Scheme no. 15**.

**Scheme no. 15**

**The present state of the pension system in Latvia**

| **1st pillar** | **2nd pillar** | **3rd pillar** |
| --- | --- | --- |
| basic mandatory scheme following the pay-as-you-go rule the notional defined contribution (NDC) | additional mandatory pension scheme, following capital rules | additional voluntary pension scheme |

Source: Own elaboration.

**The basic mandatory pension scheme** follows the rules of the notional defined contribution (NDC), which entails individual record of contributions. However, resources transferred from contributions are only recorded on individual accounts, and then used for payouts to current pensioners. Pension contributions are charged on income from all kinds of employment and self-employment to the level of 10 average remunerations[1149]. Pension contribution accounts for 20% of remuneration, of which 12% remains in the 1st pillar, and 8% is sent to the 2nd pillar[1150]. Contribution charged on annual income between

[1147] Bite I., Zagorskis V. (2003), p. 39.
[1148] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 187.
[1149] Palmer E., Stabiņa S., Svensson I., Vanovska I. (2006), p. 400.
[1150] Its target value for 2010 is 10% for each pillar, the 1st one and the 2nd one. Cf.: *Latvian*

LVL1,320 and 20,700, is in 11% paid by the employer and in 9% by the employee[1151]. The retirement age for men stays at 62[1152] and for women at 61.5[1153], with an additionally required contribution period of at least 10 years[1154]. The system provides for a minimum pension, dependent on state social benefit[1155]. This value is multiplied by the index of 110% in the case of contribution of up to 20 years, 130% for 20-30 years of contribution, and finally 150% for a period in excess of 30 years[1156]. The condition for taking early retirement is 30 years of contribution in the system[1157]. On the other hand, there is the possibility to postpone retirement by any given number of years. Payouts are calculated by dividing the capital collected by the pensioner's life expectancy:

$$P = K/G$$

where:
P – annual pension,
K – capital collected by the insured person in contributions, increased by indexation coefficient,
G – pensioner's life expectancy after retirement.

Pensions are indexed by the mixed index of consumer price increase and remuneration increase[1158]. In the case of a pension exceeding a monthly level of LVL100, the surplus is taxed with 25% of income tax. The scheme covers 98.5% of economically active population[1159].

*National Report on Adequate and Sustainable Pensions* (2005), p. 13.
1151 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 187.
1152 Bite I., Zagorskis V. (2003), p. 51.
1153 The rise in the retirement age for women to 61.5 was introduced on 1 July 2007. It is planned that on 1 July 2008 it will reach 62.
1154 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 187.
1155 Its value in 2006 was estimated at LVL45.
1156 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 62.
1157 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 188.
1158 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 62.
1159 *Latvian National Report on Adequate and Sustainable Pensions* (2005), p. 12.

**Additional mandatory pension scheme** is the capital pension plan run by the state authorities. Plans can be managed either by the state treasure agency or investment company licensed by the Commission of Financial and Capital Market[1160]. The scheme receives contribution amounting to 8% of remuneration[1161]. The contribution decreases the base of the individual income tax. The resources accumulated are invested on capital markets. After reaching the retirement age of 62, it is possible to transfer the accumulated resources to any selected life insurance company in order to receive a lifelong pension, or adding the resources to the capital accumulated in the 1st pillar[1162]. For those at the retirement age, payouts in excess of LVL1,200 annually are taxed by the 25% income tax. At present, six private pension plans operate on the market[1163]. The number of participants in this pillar, whose average age level is law, is systematically rising[1164].

**Additional voluntary pension scheme** takes the form of pension funds which are non-profit private joint stock companies. 'Non-profit' means that surplus from the fund's income cannot be withdrawn as dividend but should be attributed to the fund participants pursuant to the adopted rules[1165]. Funds could be of the closed type, which entails the possibility of participation only for employees of founder companies, or the open type, which is accessible for both groups and individuals. The founder of the closed fund can be a natural or legal person, while in the case of open funds it could solely be a bank or an insurance company.

1160 Kurowski P. (2006), p. 155.

1161 Between 2001 and 2006, contribution stayed at 2%; in 2007 it was 4%; in 2008 it amounts to 8%; and in 2009 it will be 9%, with the target level of 10% to be reached in 2010. Cf.: Whitehouse E. (2007), p. 142.

1162 *Latvian National Report on Adequate and Sustainable Pensions* (2005), p. 13.

1163 These include: Hansa atklâtais pensiju fonds, Pirmais Slçgtais Pensiju Fonds, Pirmais atklâtais pensiju fonds, Parex atklâtais pensiju fonds, SEB Unipensija oraz BALTIC TRUST BANK atklâtais pensiju fonds. Cf.: http://www.fktk.lv/en/market/pension_funds/, accessed 25 July 2007.

1164 In 2004 there were 633.7 thousand participants in this pillar, with the average age of 31.5. Cf.: *Latvian National Report on Adequate and Sustainable Pensions* (2005), p. 12.

1165 Kurowski P. (2006), p. 153.

Funds are allowed to run an indefinite number of pension plans, with clearly defined rules of contribution and payouts[1166]. Contributions are deducted from calculation base of the individual income tax. Employers can calculate contributions to voluntary funds of up to 10% of the employee's remuneration as their tax deductible expenses. After reaching the age of 55, the scheme participant can decide whether to withdraw all the capital accumulated or continue gathering the capital, with partial payouts[1167]. Benefits from this scheme are taxable pursuant to general rules[1168]. Five private pension funds operate on the market at present, including 4 open ones and 1 closed[1169]. The number of their participants is rising systematically, with their average age higher than that in the 2nd pillar[1170]. In 2004, 88% participants of this scheme were groups, while the remaining 12% were individuals[1171].

### 2.15.4 Challenges and planned changes in the pension system in Latvia

The most significant challenge facing the pension system in Latvia are unfavourable demographic tendencies as since 1991 more people have died than been born[1172]. According to forecasts, in 2050 for each 1,000 people in employment there will be 486 people at the age of over 65[1173]. Despite this conspicuous demographic threat, there are no plans to raise the retirement age significantly; its target level in 20 years' time is forecast at 63 for both sexes[1174]. There are also forecasts concerning

[1166] Kurowski P. (2006), p. 153.
[1167] *Latvian National Report on Adequate and Sustainable Pensions* (2005), p. 13.
[1168] Kurowski P. (2006), p. 157.
[1169] *Latvian National Report on Adequate and Sustainable Pensions* (2005), p. 26.
[1170] In 2004 there were 39,000 participants in the 3rd pillar, with the average age of 41. Cf.: *Latvian National Report on Adequate and Sustainable Pensions* (2005), p. 12.
[1171] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 63.
[1172] Bite I., Zagorskis V. (2003), p. 7.
[1173] In 2004 it was merely 236 persons. Cf.: *Latvian National Report on Adequate and Sustainable Pensions* (2005), p. 5.
[1174] *Latvian National Report on Adequate and Sustainable Pensions* (2005), p. 19.

a significant increase in the number of participants of capital schemes, i.e. the 2nd pillar, to as much as 87% of all those at the working age, and in the 3rd pillar to 15% in 2050[1175]. According to Jana Muizniece of the Ministry for Social Affairs, authorities are planning to make the 2nd pillar voluntary from 2034[1176]. It would be the first decision of this kind in European countries.

### 2.15.5 Summary

The pension system in Latvia is an interesting combination of the burning need for a radical systemic change and a conservative way of thinking. The reform of 1996, along with the solution adopted in the same year in Italy, was the first instance of introducing the NDC type of pension insurance in Europe, which was commonly perceived as modern. Concurrently, the Latvians lacked in consistence in modernizing their pension system, and they postponed creation of the 2nd, capital, pillar till 2001. Thus, they were overtaken by Hungary, Sweden, and Poland. Yet, even after the introduction of the 2nd pillar, its capital nature was dramatically restricted as the management of its resources was entrusted with the state company, which was allowed to invest only in state bonds. Private companies were allowed to administer the 2nd pillar resources as late as in 2003. Another proof of significant conservativeness of solutions adopted is the fact that until the end of 2006 the value of the 2nd pillar contributions was limited to 2% of employees' remuneration. However, despite criticism, what cannot be underestimated is the effort that the Latvians devote to attaining a transparent system, to mention the following basic achievements: 1) no privileges for selected professional groups, 2) the same retirement age for both sexes, at least for the nearest future, 3) allowing private companies to manage the 2nd pillar resources, and 4) expected dramatic increase in the part of contribution transferred to the capital system.

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[1175] *Latvian National Report on Adequate and Sustainable Pensions* (2005), pp. 12 and 14.
[1176] Muizniece J. (2007), p. 25.

The solution adopted in Latvia and outstanding internationally is creating the possibility of choosing the age at which to retire after reaching the statutory retirement age.

## 2.16 LITHUANIA

### 2.16.1 General information about the country

The Republic of Lithuania[1177] (*Lietuvos Respublika*) is a country in eastern Europe, situated along the coast of the Baltic Sea, and comprised of 10 districts (*apskritis*) and 12 independent municipalities.

The official language is Lithuanian. The largest ethnic group were the Lithuanians (83.4% of the population), the minorities included the Poles (6.7%) and the Russians (6.3%). The largest religious group were the Catholics (79% of the population).

According to the Constitution of the country accepted in 1992, the head of the state is the President, and the government is led by the Prime Minister.

In 2004 the Republic of Lithuania became a member of the NATO (29 March 2004) and the European Union (1 May 2004).

The currency in Lithuania is the lit (LTL[1178], *litas*).

The GDP *per capita* (PPP) was estimated in 2007 at US$16,700, with a growth rate of 8.0%, and the public debt was 15.7% of the GDP; the current national balance at the end of 2007 showed the deficit of US$5.32 billion.

The unemployment rate was 3.2%.

In July 2007 the population of Lithuania was 3,575,439 people[1179], with the following age groups: 0-14 years of age – 14.9%, 15-64 years of

1177 *Wielka Encyklopedia PWN* (2003), v. 16, pp. 64 and further.

1178 According to the ISO 4217 standard. On 31 December 2007 EUR1 was worth LTL3.4528. Cf.: http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-ltl.en.html, accessed 18 February 2008.

1179 https://www.cia.gov/library/publications/the-world-factbook/geos/lh.html, accessed 31March 2008.

age – 69.3%, 65 years old and older – 15.8%. The overall life expectancy at birth was 74.44 years, for men – 69.46 years, and 79.69 years for women.

### 2.16.2 Historic development of the pension system in Lithuania

The first regulation on unemployment insurance, including also the elderly, was introduced as early as 1919[1180]. The beginnings of the Lithuanian pension system date back to **1922**[1181]. In 1925 regulations concerning health insurance including the elderly were introduced[1182]. The first comprehensive legal regulation of the pension system was introduced in 1926[1183]. The right to pension was then granted to civil servants with the experience of 25 years of work, and the benefit amounted to 60% of their last remuneration. The law on accident insurance was passed in 1936[1184]. In 1937 a central accident insurance institution was established. The Soviet model applied in later years in Lithuania was based on the Bismarck's solution where pensions were financed from the general budget. The law of 1956 applied to those employed on the basis of an employment contract, civil servants, military officers and students. A separate pension regulation from 1964 applied to kolhozniks (collective farm workers)[1185]. The period of pension insurance entitling to receiving pension benefits was different for both sexes: 25 years for men and 20 years for women[1186]. The retirement age in the Soviet system was 60 years for men and 55 years for women. After regaining the independence in 1990, the Board of the National Social Insurance Fund[1187] (*valstybinio socialinio draudimo fondo valdyba*, SoDra) was established and was

[1180] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 204.
[1181] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 201.
[1182] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 203.
[1183] http://www.sodra.lt/en.php/about_sodra/history/1767, accessed 6 September 2007.
[1184] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 203.
[1185] *General description of the pension system for Lithuania* (2007).
[1186] Leppik L., Kruuda R. (2003), p. 61.
[1187] http://www.sodra.lt/en.php, accessed 6 September 2007.

responsible, among others, for managing the pension insurance scheme. Also in 1990 the Law on family benefits[1188] was passed. In 1991 the Vilnius Stock Exchange was established (*Vilniaus vertybinių popierių birža*, VVPB)[1189]. The 1991 reform of the social system consisted in allocating funds for pension benefits and health insurance from the central budget to a separate budget of social benefits managed by SoDra[1190]. Also in 1991 a new law on unemployment insurance was introduced[1191]. In 1992 a stabilisation programme[1192] was implemented in cooperation with the International Monetary Fund and the Securities Commission of the Republic of Lithuania[1193] (*Lietuvos Respublikos Vertybinių popierių komisija*, VPK) was appointed. In 1994 the law on family benefits was amended[1194]. On the basis of a system regulation of 1994[1195], on 1 January 1995 a new retirement law replacing the Soviet regulations of 1956 was introduced. The new law excluded pilots and ballet dancers from the entitlement to early retirement[1196]. The retirement age was increased every six months from 60 years of age for men and 55 years of age for women by two months and four months respectively[1197]. The minimal number of contribution years necessary to receive a full pension was 30 years for men and 27 years for women[1198]. The introduced changes also specified the types of pensions, people entitled to them, pension calculation bases and the sources of financing. Despite those changes, in

[1188] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 205.
[1189] Kurowski P. (2006), p. 74.
[1190] Dobravolskas A., Buivydas R. (2003), p. 65.
[1191] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 204.
[1192] Kurowski P. (2006), p. 73.
[1193] http://www.lsc.lt/en/index.php?fuseaction=about.display, accessed 6 September 2007.
[1194] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 205.
[1195] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 201.
[1196] Dobravolskas A., Buivydas R. (2003), p. 44.
[1197] Increasing the retirement age was to end in 2001, however, this process was slowed down and ended in 2006; since that year, the retirement age for men has been 62.5 years, and 60 years for women. Cf.: *2005 Lithuania's National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 4.
[1198] Dobravolskas A., Buivydas R. (2003), p. 48.

1996 the expenses on the public pension system exceeded the income of the system[1199]. In 1996 also first life insurance agencies appeared[1200]. In 1997 health insurance was excluded from the competence of the SoDra and transferred to health funds. In 1999 the law on accident insurance was amended[1201]. On the basis of the regulation of 1999[1202], since the year 2000 it has been possible to accumulate retirement money in voluntary private retirement funds, but only under schemes run at work places[1203]. This marked the first step towards the establishment of the 3rd pillar in the Lithuanian pension system[1204]. Also in 2000 the laws on accident and health insurance were amended[1205]. In 2000 the average pension from the public system amounted to LTL312[1206]. Since 2002 the number of contribution years entitling to a full pension has grown from 27 years for women to 30 years[1207]. In 2002 a pension contribution amounted to 25% (22.5% was paid by the employer, and 2.5% by the employee)[1208]. Two conditions had to be met in order to be entitled to the public pension: reaching the retirement age and paying pension contributions for 15 years. The system also provided social pension for people who reached the retirement age, but who for some reasons were not entitled to pension[1209]. The retirement law reform of December 2002 allowed for the operation of private retirement programmes for individuals under the 3rd pillar[1210]. The social minimum constituting the basis for determining the base pension in 2002 was LTL147[1211]. In 2003 the expenditure on social care

1199 Dobravolskas A., Buivydas R. (2003), p. 53.
1200 Kurowski P. (2006), p. 76.
1201 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 203.
1202 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 201.
1203 This possibility was until 2004 only a record with no institutional value.
1204 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 36.
1205 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 203.
1206 Dobravolskas A., Buivydas R. (2003), p. 49.
1207 The final contribution period was reached in 2004. At that time the required contribution period entitling to a full pension was 30 years, for both men and women.
1208 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 36.
1209 Dobravolskas A., Buivydas R. (2003), p. 35.
1210 Dobravolskas A., Buivydas R. (2003), p. 42.
1211 Whitehouse E. (2007), p. 145.

reached 13.7% of the GDP, and on pension system – 6.9% of the GDP[1212]. Under the reform of 2003 the Insurance Supervision Commission of the Republic of Lithuania[1213] (*Lietuvos Respublikos draudimo prieţiűros komisija*, DPK) was appointed at the beginning of 2004. In 2004 in view of favourable macroeconomic situation, it was possible to reach the balance of the obligatory public pension system, and in the following years it was even possible to produce a surplus[1214]. At the beginning of 2004, after five years of dead law, voluntary pension funds constituting the 3rd pillar of the Lithuanian pension system[1215] emerged, as well as private funds managing companies constituting the 2nd pillar of the Lithuanian pension system[1216]. Contributions were transferred to private managing companies of the 2nd pillar through the SoDra, and in 2004 it reached 2.5% of the remuneration[1217]. In 2004, over 50% of people insured in the public system chose the possibility of transferring their contributions to the 2nd pillar[1218]. In 2005 the value of the contribution increased to 3.5%, in 2006 to 4.5%, and on 1 January 2007 it reached the final level of 5.5% of the remuneration[1219].

### 2.16.3 The present state of the pension system in Lithuania

At the moment the pension system in Lithuania consists of three pillars: 1) the obligatory public system, constituting the 1st pillar, 2) the voluntary pension system, constituting the 2nd pillar[1220], and 3) the

[1212] *2005 Lithuania's National Strategy Report on Adequate and Sustainable Pensions* (2005), pp. 7 and 8.

[1213] http://www.dpk.lt/, accessed 6 September 2007.

[1214] *2005 Lithuania's National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 3.

[1215] Kurowski P. (2006), p. 125.

[1216] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 201.

[1217] Holzmann R. and Hinz R. et al. (2005), p. 152.

[1218] *2005 Lithuania's National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 11.

[1219] Kurowski P. (2006), p. 127.

[1220] In the report of the Lithuanian government from 2005, this system was defined as the 2nd tier of the 1st pillar. For the purpose of this paper, however, we have decided to use voluntary additional retirement insurance, constituting the 3rd pillar of the pension system[1221]. The present state of the pension system in Lithuania is presented in **Scheme no. 16**.

**Scheme no. 16**

**The present state of the pension system in Lithuania**

| **1st pillar** | **2nd pillar** | **3rd pillar** |
|---|---|---|
| the obligatory public system functioning under the pay-as-you-go scheme | the voluntary pension system | the voluntary additional retirement insurance |
| managed by the Board of the National Social Insurance Fund *valstybinio socialinio draudimo fondo valdyba*, SoDra | private managing companies which hold the Securities Commission of the Republic of Lithuania (*Lietuvos Respublikos Vertybinių popierių komisija*, VPK) licence or insurance institutions dealing with pension schemes under the Insurance Supervision Commission of the Republic of Lithuania (*Lietuvos Respublikos draudimo priežiūros komisija*, DPK) licence | pension funds with the Securities Commission of the Republic of Lithuania (*Lietuvos Respublikos Vertybinių popierių komisija*, VPK) licence |

Source: Own elaboration.

**The obligatory public system** managed by the SoDra is the system functioning under the pay-as-you-go scheme. Pension within this system is paid to the elderly living only in Lithuania, as well as to those who worked and paid their retirement contributions. Pensions for residents are financed from general taxes, and the pensions of working people from the paid contributions. The system encompasses four groups[1222]: 1) people employed under an employment contract, the self-employed, uniformed people and the relatives of diplomats; 2) farmers and adult

the term `the 2nd pillar'. Cf.: *2005 Lithuania's National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 4.

[1221] Natali D. (2004a).

[1222] Dobravolskas A., Buivydas R. (2003), pp. 57 and 58.

members of their families and patent holders; 3) people doing the military or substitute service, parents of small children, and the clergy; 4) other people insured voluntarily. The retirement age for men reaches 62.5 years, and for women 60 years[1223]. The contribution amounts to 26.1% of the remuneration, of which 23.6% is paid by the employer, and 2.5%[1224] by the employee, and the contribution is either submitted to the SoDra as a whole, or 5.5% is submitted to the 2nd pillar, i.e. private managing companies or insurance institutions dealing with pension schemes. Participation in the 2nd pillar is voluntary but operates only in one way – after choosing the participation in the 2nd pillar it is not possible to return to the SoDra. If the income is below the minimal remuneration the contribution is not paid[1225]. The system does not specify the upper limit of the insured income[1226]. For the self-insured or the voluntarily insured the contribution amounts to half of the base amount (B) and additionally 15% of the declared income[1227]. The required minimal contribution period lasts 15 years. The period required in order to receive a full benefit is 30 years[1228]. The benefit is composed of two elements: 1) the base amount, and 2) the complimentary part, and is calculated in accordance with the following formula:

$$P = B + 0{,}005 \bullet S \bullet K \bullet D + 0{,}005 \bullet s \bullet k \bullet D,$$

where,
P – pension amount,
B – base amount,
S – contribution period until the end of 1994,
s – contribution period after 1994,
K – individual income factor until 1994,
k – individual income factor after 1994,
D – the amount of the insured income.

1223 Whitehouse E. (2007), p. 145.
1224 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 67.
1225 In 2006 it amounted to LTL550. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 201.
1226 Whitehouse E. (2007), p. 145.
1227 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 201.
1228 Dobravolskas A., Buivydas R. (2003), p. 48.

The values of B and D are determined by an administrative decision, K factor concerns five best years in the period between 1984 and 1993, and k factor is determined by dividing the remuneration to which contributions applied by the amount of D. The values of K and k must not be higher than 5[1229]. The system also allows for social pension for those who reached the retirement age, but who for some reasons are not entitled to draw the pension. This type of pension is equal to the base amount (B)[1230]. It is possible to retire 5 years earlier, on condition that the contributions have been paid for at least 30 years by people who have been registered as unemployed for 12 months[1231]. Earlier retirement means lowering the amount of the benefit by 0.4% for each month of the earlier retirement[1232]. It is also possible to retire later, which is rewarded by increasing the value of the benefit by 8% for each year of additional work; later retirement is limited up to +5 years in relation to the retirement age[1233]. The average pension paid by the public system in 2004 exceeded LTL350 monthly[1234]. Pensions paid by the public system are not subject to income tax[1235].

**Voluntary pension system** is implemented by accumulating contributions transferred to the SoDra. Then, in accordance with the choice of a given participant, the contribution either stays in the SoDra or is submitted to private managing companies which hold the VPK licence, or to insurance institutions dealing with pension schemes under the DPK licence. The value of the submitted contribution amounts to 5.5% of the reference base. Since this solution is relatively new, so far no pensions have been paid by this system. In 2006, 54% of the participants of the public system decided to participate in the voluntary programme[1236].

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[1229] Dobravolskas A., Buivydas R. (2003), pp. 48 and 49.

[1230] In July 2006 this amount reached LTL230. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 201.

[1231] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 201.

[1232] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 202.

[1233] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 201.

[1234] *2005 Lithuania's National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 13.

[1235] Whitehouse E. (2007), p. 145.

[1236] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 67.

**Voluntary additional retirement insurance** may be individual or collective. Any pension fund in the 3rd pillar has the legal form of a limited liability company. The funds are open funds and may deal with any number of pension schemes. Pension funds of this system may be managed by licensed life insurance institutions or by banks. Running a pension fund requires the VPK licence[1237]. Contribution period must not be shorter than 10 years. A yearly contribution, which qualifies for a tax reduction, must not exceed the value of 25% of personal yearly income[1238]. So far, no pensions have been paid from this system. The 3rd pillar has not become more successful. Legal regulations of 1999 had long been dead, and in 2004 only 3,200 people had their accounts in this system[1239].

### 2.16.4 Challenges and planned changes in the pension system in Lithuania

The greatest challenge for the pension system in Lithuania is the low value of pensions, especially in comparison with the high level of pension contributions[1240]. The introduced changes have already been noticeable – in 2004 the average pension for those aged 66-70 was 14% higher than the average pension for those over 80[1241]. Financing the obligatory public system within the pay-as-you-go model in Lithuania means the necessity to provide for the growing population of pensioners with the decreasing number of employed people. It is anticipated that around the year 2042 the increasing number of pensioners will be the same as the decreasing number of people paying their contributions. However, the anticipated favourable economic situation in the next years should cause a significant growth of earnings, and at the same time in the amount of the collected

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1237 Kurowski P. (2006), p. 147.

1238 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 67.

1239 *2005 Lithuania's National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 11.

1240 Dobravolskas A., Buivydas R. (2003), p. 61.

1241 *2005 Lithuania's National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 12.

contributions[1242]. This should allow for full solvency of the system, at least until the year 2020[1243]. It is also presumed that owing to the growing affluence the capital systems realised under the 3rd pillar will be more appreciated in Lithuania.

### 2.16.5 Summary

The pension system in Lithuania is an example of departure from the stiff regulations implemented in the Soviet period to the relatively flexible solutions used nowadays. The remains of the Soviet system, although formally abolished, are still present in the awareness of the inhabitants of this country. This is especially visible in their reluctance to participate in capital solutions offered under the 3rd pillar. Another problem is the low amounts of pensions paid to the elderly. The currently adopted solutions in Lithuania give hope that the pension system will become stable until 2020.

Among the solutions implemented in the Lithuanian pension system which might be considered interesting for international comparisons is the complete freedom with regard to the decision on the participation in the 2nd pillar, with no age limits imposed.

## 2.17 LUXEMBOURG

### 2.17.1 General information about the country

The Grand Duchy of Luxembourg[1244] (*D'Groussherzogtum Lëtzebuerg*) is a country in western Europe bordered by Belgium, France and Germany. It is comprised of 3 districts (*distrikter*).

[1242] *2005 Lithuania's National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 17.
[1243] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 69.
[1244] *Wielka Encyklopedia PWN* (2003), v. 16, pp. 215 and further.

The official languages are German, French, and Luxembourgish. The largest ethnic group were the Luxembourgers (64% of the population). The rest were the Portuguese, the Italians, the Montenegrins, the Albanians, and the incoming guests and workers from other European countries. The largest religious group were the Catholics (87% of the population), and the remaining 13% were mainly Protestants, followers of the Judaism, and Muslims. According to the Constitution of the country of 1868, the head of the state is the Grand Duke, and the government is led by the Prime Minister.

In 1949 Luxembourg became a member of the NATO, and in 1957 it entered the European Economic Community. In 1999 Luxembourg joined the Economic and Monetary Union and exchanged the Luxembourg francs to the euro[1245].

The current currency in Luxembourg is the euro.

The GDP *per capita* (PPP) was estimated in 2007 at US$80,800, with a growth rate of 5.0%, the public debt 2.6% of the GDP; the current national balance at the end of 2007 showed the surplus of US$11.3 billion.

The unemployment rate was 4.4%.

In July 2007 Luxembourg had a population of 480,222[1246], with the following age groups: 0-14 years of age – 18.8%, 15-64 years of age – 66.6%, 65 years of age and older – 14.7%. The overall life expectancy at birth was 79.03 years, 75.76 years for men, and 82.52 years for women.

### 2.17.2 Historic development of the pension system in Luxembourg

The beginnings of the pension system in Luxembourg date back to the 19th c., when the first workers' organizations of mutual help insuring against such things as the risk of old age were established. Such

[1245] Luxembourg francs (LUF) were converted into the euro (EUR) at the exchange rate of LUF40.3399 per EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 31 March 2008.

[1246] https://www.cia.gov/library/publications/the-world-factbook/geos/lu.html, accessed 31March 2008.

organizations, known as friendly societies (*les sociétés de secours mutuel*), received in 1891 a formal-legal approval of the Grand Duke Adolph[1247]. In 1901 the first legal regulation on sickness insurance appeared[1248], and in 1902 a regulation on accident insurance[1249]. In **1911** the first public pension scheme for blue-collar workers employed by private persons was created[1250]. The pension scheme adopted in Luxembourg at that time was entirely based on Bismarck's concept and ensured a base benefit. In 1912 a legal regulation for civil servants, local government officials and hired workers of public institutions was passed. The regulation established a Contingency Fund (*La Caisse de prevoyance*). In 1921 the first legal regulation on unemployment insurance appeared[1251]. In 1925 the first Code of Social Insurance was drafted (*Code des Assurances Sociales*, C.A.P.)[1252]. In 1929 the formula for calculating retirement benefits radically changed. The so-called fixed part (*part fixe*) financed from the budged was determined, as well as the variable part depending on the number of working years and the amount of remunerations. In 1931 pension insurance was also applied to white-collar workers[1253]. In 1946 the Office of Social Insurance against Old Age and Disability was established (*Office des Assurances Sociales Etablissement d'Assurance contre la Vieillesse et l'Invalidité*, AVI)[1254]. In 1947 there was the first legal regulation concerned with family benefits[1255]. In 1951 the pension insurance was also applied to craftsmen and freelancers[1256], and the Pension Fund for Private Employees was set up for them (*Caisse de Pension des Employés Privés*, CPEP)[1257]. On

[1247] Pacud R. (2004), p. 215.
[1248] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 208.
[1249] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 210.
[1250] Schulze I. (2007), p. 815.
[1251] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 211.
[1252] Schulze I. (2007), p. 815.
[1253] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 207.
[1254] http://www.avi.lu/, accessed 15 December 2007.
[1255] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 211.
[1256] Schulze I. (2007), p. 816.
[1257] http://www.legilux.public.lu/leg/a/archives/1951/0510609/0510609.pdf#page=5, accessed 15 December 2007.

26 May 1954, the legal regulation on pensions for full-time functionaries was published (*réglant les pensions des fonctionnaires de l'Etat*)[1258]. In 1956 pension insurance was applied to farmers, and the Farmer Pension Fund was established (*Caisse de pension agricole*, CPAG), whereas in 1960 pension insurance started to cover the self-employed in industry[1259] and the Pension Fund for Craftsmen, Tradesmen and Industrialists was set up (*Caisse de pension des Artisans, des Commerçants et Industriels*, CPACI). The Act of 1961 allowed insurance institutions acting as friendly societies to offer pension insurance. The reform of 1964 was a significant step towards harmonizing pension rules for various professional groups. In the same year it became possible to combine pension schemes prepared for freelance workers with the schemes for white-collar workers. In 1967 craftsmen's pensions underwent indexation. In 1969 it became possible to buy out the lacking contribution periods necessary to receive a pension. In 1970 pensions of the self-employed in industry underwent indexation[1260]. In 1972 a special pension regime for full-time employees was established (*le régime des employés de l'Etat*). In 1974 it was decided that the minimal pension should amount to 5/6 of the minimal remuneration, on condition that a given person has participated in the pension system for 35 years, and moreover, farmers' pensions underwent indexation[1261]. In 1975 the law on unemployment insurance was amended[1262], and so was the law on family benefits in 1977[1263]. In 1984 the amount of the contribution paid by the worker in the general system was set at 8% of the gross remuneration. In 1987 the so-called fixed part (*part fixe*) of the pension was replaced with the term of a general pension insurance (*majoration forfaitaire*), and moreover: 1) the minimal contribution period was prolonged from 5 to 10 years, 2) the period required for being entitled to early retirement was

[1258] http://www.fonctionpublique.public.lu/travailler/fonctionnaires/pension/index.html, accessed 10 December 2007.
[1259] Schulze I. (2007), p. 816.
[1260] Schulze I. (2007), p. 816.
[1261] Schulze I. (2007), p. 816.
[1262] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 211.
[1263] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 211.

prolonged to 40 years of contributions, 3) the regulations concerning the rules for granting general pensions were changed from the required 15 years of residency in Luxembourg to 40 years of contribution period[1264]. From 1 January 1988, the Code of Social Insurance was amended, and Book III of the Code (*Livre III du C.A.P.: Assurance pension*) became the legal basis of the general pension system. The system, however, did not apply to civil servants and local government officials, the employees of public utility institutions, and the employees associated with the Society of the Luxembourgian National Railways (*Société Nationale des Chemins de Fer luxembourgeois*). In 1991 the value of the pension base part was increased from 20% to 22% of the minimal remuneration, the growth rate of the accumulated contributions was increased from 1.6% to 1.78% and the age of early retirement was lowered from 60 years to 57 years on condition that the participation in the system lasted 40 years[1265]. In 1992 certain legal changes concerned with sickness and health insurance were made, and they became effective at the beginning of 1994[1266]. The reform of 1996 increased the value of the contributions paid by civil servants from 3% to 8%, and abolished the rule of equalizing the pension calculated through the pension formula to the minimal level[1267]. The law of 1998 abolished all the pension privileges of public officials in relation to those recently employed , and it also partially abolished the privileges in relation to those already employed. From 1 January 1999, those employed in public administration started to pay their pension contributions in a similar way to those employed in the private sector[1268]. Furthermore, the replacement rate for public officials employed before 1 January 1999 was lowered from 5/6, i.e. from nearly 83.33%, to 72% of the last remuneration. Moreover, in 1999 another legal regulation concerning the complimentary pension systems was introduced (*La loi relative aux regime complementaires de pension*) to regulate the functioning of the

[1264] Schulze I. (2007), p. 821.
[1265] Schulze I. (2007), pp. 821 and 822.
[1266] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 208.
[1267] Pacud R. (2004), p. 216.
[1268] Schulze I. (2007), p. 817.

company pension plans. In 2000 the law on the coordination of pension systems (general and particular) was passed, that is the law for public functionaries (*Coordination des regimes légaux de pensiones*). The reform of 2002 encouraged later retirement, and rewarded tax reductions for voluntary contributions to individual pension schemes[1269]. The law passed in 2004 allowed to allocate the surpluses of the basic pension scheme to the strategic securities portfolio[1270].

### 2.17.3 The present state of the pension system in Luxembourg

Presently the pension system in Luxembourg consists of three pillars: 1) the obligatory base pension insurance, 2) the voluntary pension insurance organized by the employer, and 3) the voluntary individual pension schemes. There is also the activity of the social care (*allocation de vie chére*, AVC), which, however, ensures financing only at the very minimal level[1271] from October 2005 the benefit for a single person amounted to €1,071 monthly[1272]. The present state of the pension system in Luxembourg is presented in **Scheme no. 17**.

[1269] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 71.
[1270] *Luxembourg. National Strategy Report on Pensions. 2005* (2005), p. 7.
[1271] Schulze I. (2007), p. 819.
[1272] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 71.

**Scheme no. 17**

## The present state of the pension system in Luxembourg

<table>
<tr><th colspan="5">1st pillar</th><th colspan="3">2nd pillar</th><th>3rd pillar</th></tr>
<tr><td colspan="5">the obligatory base pension insurance</td><td colspan="3">the voluntary pension insurance organized by the employer</td><td rowspan="4">the voluntary individual pension schemes</td></tr>
<tr><td colspan="3">a general pension insurance majoration forfaitaire or régime général</td><td colspan="2">a state pension insurance majoration proportionelle or régimes spéciaux</td><td>internal les régimes internes</td><td colspan="2">external les régimes externes</td></tr>
<tr><td>regular pension pension de villesse normale</td><td>early retirement pension de villesse anticipée</td><td>postponed retirement pension de villesse différée</td><td>the old one régime spécial transitoire</td><td>the new one régime spécial nouveau</td><td>company funds</td><td>insurance funds created on the basis of an agreement between the company and the insurance institution contrat d'assurance-grupe</td><td>private pension insurance funds fond de pension</td></tr>
<tr><td colspan="3">supervised by the Common Social Security Centre Centre Commun de la Sécurité Sociale, CCSS</td><td colspan="2">administrated by: State Personnel Administration l'Administration du Personnel de l'Etat, Society of the Luxembourgian National Railways Société Nationale des Chemins de Fer luxembourgeois, and the Functionaries and Local Government Employees Contingency Fund La Caisse de Prévoyance des Fonctionnaires et Employés communaux</td><td colspan="3">supervised by the Financial Sector Supervision Commission Commission de Surveillance du Secteur Financier, CSSF</td></tr>
</table>

Source: Own elaboration.

**The obligatory base pension insurance** is composed of two elements: a) a general pension insurance (*majoration forfaitaire* or *régime général*), and b) a state pension insurance (*majoration proportionelle* or *régimes spéciaux*). All pensioners pay contributions of 2.65% on health insurance, and additionally, contributions of 1.00% on care services[1273]. The pension is taxed after it exceeds the amount of €1,174 monthly.

**The general pension insurance** is for all the working and self-employed people, excluding those who participate in the state pension insurance scheme. The system is based on a repartition solution operating within the pay-as-you-go scheme with a seven-year-long period of reserve compensation[1274]. The insurance contribution, covering the pension, amounts to 24% of the reference base, i.e. the remuneration or income. The contribution is financed in equal shares by the employer, the employee and the state. In the case of the self-employed, the contribution paid by them equals 16% of their income. In the case of those who turned 55 and whose time of work exceeds 38 years, the contribution is increased yearly by the value between 0.01% to 2.05%, which allows to increase the reference base for calculating their pensions[1275]. The contribution is calculated from the income exceeding €523.43 per month, i.e. 1/3 of the minimal remuneration[1276], up to the level reaching 5 times the minimal remuneration[1277]. The standard retirement age is 65 years old[1278], however, it is possible to prolong this time to 68 years[1279]. Retirement pension (*pension de viellesse*) depends on the time of participation in the system and on the level of remunerations received, and it constitutes the sum of the amount depending on the number of work years and the among

1273 Whitehouse E. (2007), p. 96.

1274 *The Handbook of Western European Pension Politics* (2007), p. 899.

1275 *Luxembourg. National Strategy Report on Pensions. 2005* (2005), pp. 10 and 11.

1276 http://www.avi.lu/pensions/pension_vieillesse_general.pdf, accessed 12 December 2007.

1277 In 2006 the upper limit of the income from which pension contribution was calculated reached €7,517.12 per month. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 207.

1278 Whitehouse E. (2007), p. 95.

1279 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 37.

depending on remunerations. The amount depending on the number of work years is flat-rated and with 40 years of participation in the system reaches 23.5% of minimal remuneration[1280]. The amount depending on remuneration is calculated through multiplying an indexed value of all the pensions paid to the system by 1.85% for each year in the system[1281]. The scheme allows for three types of pensions: 1) regular pension (*pension de villesse normale*), 2) early retirement (*pension de villesse anticipée*), and 3) postponed retirement (*pension de villesse différée*). Regular pension is subscribed to those who turned 65. In order to receive this kind of pension a person needs to be 65 years old and have the history of paying contributions for at least 10 years. If a 65-year-old person does not qualify for the pension due to the contribution period shorter than 10 year, he or she may: a) either choose a single payout of the accumulated contributions, b) or keep paying contributions until the age of 68, if after this period he or she completes the 10-year contribution period, c) or pay off the lacking contributions and receive a life pension – this is the so-called retroactive purchase of insurance periods (*achat retroactif de periodes d'assurance*). Early retirement is possible as soon as at 57 on condition that pension contributions have been paid for 40 years. If a given person paid his or her contributions for a period shorter than 40 years, he or she will be entitled to early retirement at the age of 60, on condition, however, that the contributions were paid for at least 10 years. Postponed retirement pension is granted to those between 66 and 68 years of age. The system allows for the minimal pension for those who have paid insurance contributions for 40 years[1282]. With a shorter contribution period, the minimal pension is lowered by 1/40 for each year less than 40 years. The system also allows for the so-called maximal pension, which must not exceed €6,265.25

[1280] Schulze I. (2007), p. 819. In 2005 it amounted to €330 monthly. Cf.: *Luxembourg. National Strategy Report on Pensions. 2005* (2005), p. 6.

[1281] Whitehouse E. (2007), p. 95.

[1282] Since October 2005 the minimal pension has amounted to €1,353.29 monthly. Cf.: *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 71.

per month[1283]. Pensions are subject to mixed indexation. In relation to prices, pensions are indexed automatically at the price increase of 2.5%. Moreover, pensions are reviewed every two years, i.e. their increase is compared with the increase of remunerations. The system is managed by pension funds, different for particular professional groups: for blue-collar workers – the AVI, for white-collar workers, privately employed and the employees of charity institutions – the CPEP, for the self-employed – the CPACI, and for farmers – the CPAG. The system is supervised by a governmental agency – the Common Social Security Centre (*Centre Commun de la Sécurité Sociale*, CCSS).

**The state pension insurance** comprises two schemes – 1) the old one (*régime spécial transitoire*) and 2) the new one (*régime spécial nouveau*)[1284]. The old scheme applies to civil servants employed until 31 December 1998, and the new one to those employed after that date. In the old scheme, pension contribution (*prélevement*) paid from the received remuneration equals 8%. The conditions required to receive the standard pension is being 60 years old and having worked 30 years in public service. It is also possible to retire early, at the age 57, on condition that a given person has worked 40 years in the system. For people aged 65, the required number of years in the system is 10[1285]. The amount of the pension depends on the value of the last remuneration and on how long a person worked in public service. Pensions are calculated by adding two values: 1) 1/3 of the last remuneration and 2) 1/60 of the remuneration for each year of public service. In the case of the new scheme, the principles are the same as the principles applying in the general system, with the exception being that there is no upper limit of remuneration from which retirement contributions are paid. The administration of the public schemes is carried out by the following institutions: State Personnel Administration (*l'Administration du Personnel de l'Etat*), Society of the

1283 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 207.
1284 *Luxembourg. National Strategy Report on Pensions. 2005* (2005), p. 12.
1285 http://www.fonctionpublique.public.lu/travailler/fonctionnaires/pension/transitoire/index.html, accessed 12 December 2007.

Luxembourgian National Railways (*Société Nationale des Chemins de Fer luxembourgeois*), and the Functionaries and Local Government Employees Contingency Fund (*La Caisse de Prévoyance des Fonctionnaires et Employés communaux*).

**Pension insurance schemes organized by the employer** constitute the 2nd pillar of the pension system in Luxembourg. They are organized in three forms: one internal (*les régimes internes*) a) as company funds, and two external (*les régimes externes*): b) as insurance funds created on the basis of an agreement between the company and the insurance institution (*contrat d'assurance-grupe*), and c) as private pension insurance funds (*fond de pension*). Pension contributions in this pillar require the employer to pay a 20% tax. Pensions are not taxed. The body responsible for the supervision of the 2nd pillar is the Financial Sector Supervision Commission (*Commission de Surveillance du Secteur Financier,* CSSF)[1286].

**Company funds** consist in the employer's commitment to pay the employee a specified pension in the future. This means a balanced division of the company's income into the part belonging to the owners and the reserves for the future pensions. Functioning of those funds is regulated individually, still the contribution period may not be shorter than 10 years, and the retirement age should fall between 60 and 70. It is possible to receive a single payout of the accumulated amount after reaching the retirement age. In the case of changing the place of employment, the employer is obliged to guarantee the employee all the acquired retirement rights in the situation when the employee leaves work at his own request, as well as in the situation when he is dismissed due to serious violations in the place of work[1287].

**Insurance funds** – the company and an insurance institution enter into an agreement concerned with employee pension insurance, and the company transfers insurance contributions to the insurance institution.

[1286] Schulze I. (2007), p. 818.
[1287] *Luxembourg. National Strategy Report on Pensions. 2005* (2005), p. 13.

The insurance institution is responsible for paying the pensions. Also in this case functioning of those funds is regulated individually.

**Private pension funds** function on the basis of agreements between a given company and a financing institution running the pension fund. The company transfers pension contributions, and the financing institution running the pension fund is responsible for their proper investment and for paying the pensions.

**Individual pension insurance** constitutes the 3rd pillar of the pension system in Luxembourg. It is realized in the form of pension schemes offered by life insurance companies, most commonly by friendly societies. A pension contribution in this scheme lowers the tax basis by the income tax. After reaching the retirement age, it is possible to pay out 50% of the accumulated funds. The remaining funds are paid in the form of annuities, which are subject to tax amounting to half of a standard income tax[1288].

### 2.17.4 Challenges and planned changes in the pension system in Luxembourg

The most important challenge that the pension system in Luxembourg is facing is concerned with the demographic situation of the country. Low population growth and high economic dependency on foreign workers may have a negative impact on the functioning of the pension system. Among the 300,000 people employed in Luxembourg, only 34% are native Luxembourgers. The remaining group are foreigners permanently living in Luxembourg (27%) and people working in Luxembourg via trans-border communications in computer systems (39%)[1289]. However, the affluence of Luxembourgers and the favourable budgetary and economic situation should ensure full solvency of the system. It also seems possible to retain the high replacement rate, which in Luxembourg reaches about 98%[1290]. Also, it is anticipated that the amount of pension contributions

[1288] *Luxembourg. National Strategy Report on Pensions. 2005* (2005), p. 14.
[1289] *Luxembourg. National Strategy Report on Pensions. 2005* (2005), p. 19.
[1290] Pacud R. (2004), p. 234.

will not increase, since the level of 22% seems sufficient and the already accumulated surpluses are three times higher than yearly payouts[1291]. With such state of affairs, only very pessimistic scenarios would see the necessity of increasing the amount of pension contributions and implementing radical changes in the system in the future[1292].

### 2.17.5 Summary

The pension system in Luxembourg is an efficient solution securing the financial needs of the elderly at a very high level. The 1st pillar of the system operates according to the Bismarck's rules with the share of general budget funds in the insurance contribution at the level of 8% of the remuneration or income. The solvency of the base system and the gathered surplus allows to remain positive about the future. However, despite this promising picture, it should be noticed that the solvency of the Luxembourgian pension system in the base tier is only possible thanks to budget share in paying pension contributions. The element that distinguishes the Luxembourgian pension system from the systems of other countries is the possibility to receive reimbursement of the contributions paid for the base pension insurance after reaching the age of 65 in the case when a person is not entitled to the pension benefit.

## 2.18 MALTA

### 2.18.1 General information about the country

The Republic of Malta[1293] (*Republika ta'Malta*) is a country in southern Europe, in the central part of the Mediterranean Sea, comprised of five islands: Malta Island, Gozo, Comino, Cominotto, and Filfa, the first three of which are inhabited.

1291 *Luxembourg. National Strategy Report on Pensions. 2005* (2005), p. 6.
1292 Haines L. (2006).
1293 *Wielka Encyklopedia PWN* (2003), v. 16, pp. 514 and further.

The official languages are Maltese and English. The largest ethnic group were the Maltese[1294] (96% of the population). The largest religious group were the Catholics (98% of the population).

According to the Constitution of 1964, the head of the state is the President, and the government is led by the Prime Minister.

On 1 May 2004, Malta became a member of the European Union. On 1 January 2008, Malta entered the Economic and Monetary Union and replaced the Maltese lira with the euro[1295].

The current currency in Malta is the euro.

The GDP *per capita* (PPP) was estimated in 2007 at US$23,200, with a growth rate of 3.4%, and the public debt 66.5% of the GDP[1296]; the current national balance at the end of 2007 showed the deficit of US$0.411 billion.

The unemployment rate was 6.8%

In July 2007 the population of Malta was 401,880 people[1297], with the following age groups: 0-14 years of age – 16.7%, 15-64 years of age – 69.5%, 65 years of age and older – 13.8%. The overall life expectancy at birth was 79.15 years, 76.95 for men and 81.47 years for men.

### 2.18.2 Historic development of the pension system in Malta

The origins of the public pension system in Malta are connected with British legislation and date back to 1885, when pension care started to cover policemen (the Malta Police Force), and then civil servants (the Malta Civil Service). Then, in 1921, social care was applied to local-authorities officers. The year 1927 brought a legal regulation concerned with pensions for widows and orphans (the Widows and Orphans

[1294] The Maltese are the descendants of the ancient Carthaginians and Phoenicians, and also some Italian and other Mediterranean nations.

[1295] The Maltese lira (MTL) was converted into the euro (EUR) at the rate of MTL0.429300 for EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 20 February 2008.

[1296] http://www.eubusiness.com/Finance/1179313213.44/, accessed 17 December 2007.

[1297] https://www.cia.gov/library/publications/the-world-factbook/geos/mt.html, accessed 31March 2008.

Pensions Act)[1298]. In 1929 the first legal regulation on accident insurance appeared (the Workmen's Compensation Act), which also covered benefits for people in the old age[1299]. On 1 August 1948, a new pension law was introduced (the Old Age Pensions Act) based on British principles of Beveridge seeing pension as a social right of older people, and available to those who turned 60[1300]. In **1956** the first complex law dealing with pensions, health insurance and unemployment insurance was introduced in Malta (the National Assistance Act)[1301], as well as a detailed regulation on contributory pensions (the National Insurance Act), where the amount of the pension depended on the level of remunerations. According to this law, contributions were to be paid in equal shares by the employer, the employee and the state budget. In 1957 a special pension for the blind over 40 years old was introduced (the Blindness Pension), and from 1962 it was treated as a part of the social security available to people who turned 14[1302]. In 1965 the scope of the National Insurance Act was extended to the self-employed and all the other citizens of Malta, even the unemployed[1303]. In 1974 the first legal regulation on family benefits[1304] and pensions for the handicapped was introduced (non-contributory Handicapped Pension scheme)[1305]. In 1979 the National Insurance Act[1306] was amended, and on 22 January 1979 the pension calculation formula was introduced, where the pension amounted to 2/3 of the last income. This proportion could be lowered if the number of weekly contributions paid within the employment period was less than 150[1307]. In the same year all the

[1298] http://www.msp.gov.mt/services/subpages/content.asp?id=72&heading=History, accessed 20 December 2007.
[1299] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 216.
[1300] *Social Security in Malta – A Synopsis* (2006), p. 12.
[1301] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 213.
[1302] http://www.msp.gov.mt/services/subpages/content.asp?id=72&heading=History, accessed 20 December 2007.
[1303] *Social Security in Malta – A Synopsis* (2006), p. 12.
[1304] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 217.
[1305] http://www.msp.gov.mt/services/subpages/content.asp?id=72&heading=History, accessed 20 December 2007.
[1306] *National Strategy Report on Pensions. MALTA* (2005), p. 2.
[1307] Abela A. M., Cordina G., Muscat Azzopardi N. (2003), p. 31.

company pension funds were closed and the accumulated contributions were paid out in a single payment to the participants of those funds. Such a decision meant the elimination of the element characteristic of the 2nd pension pillar in Malta. At the same time the amount of the National Minimum Pension was determined[1308]. In 1981 the maximum income subject to pension contributions was set at MTL6,750 a year[1309]. In 1987 a new complex law on social security was introduced (the Social Security Act)[1310], which covered pension insurance, health and accident insurance, unemployment insurance and family benefits[1311]. In January 1991 a supplementary pension allowance for widows and orphans was provided (the Widower's Pension and Orphan's Supplementary Allowance), and in January 1996 the Supplementary Pension Allowance for all the citizens of Malta who reached the retirement age and received the income below the specified level[1312]. In 1999 the average pension was MTL38 a week plus a supplementary allowance of MTL58[1313] paid every six months. In 1999 the pension contribution paid by the employee was increased to 9% of the remuneration, and in 2000 to 10%[1314]. In the case of the self-employed, a yearly pension contribution was set at 15% of the income for the previous year[1315]. In 2000 lone pensioners participating in the non-contributory scheme received a weekly pension of MTL29.44, as well as a weekly additional bonus in the amount of MTL1.34 and the Six Monthly Bonus equalling MTL58.00[1316]. In the same year, 40% of pensioners received a

[1308] http://www.msp.gov.mt/services/subpages/content.asp?id=72&heading=History, accessed 20 December 2007.
[1309] http://www.mfsp.gov.mt/pensions/documents/frpensions.pdf, accessed 20 December 2007.
[1310] http://docp.justice.gov.mt/lom/legislation/english/leg/vol_7/chapt318.pdf, accessed 20 December 2007.
[1311] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 213.
[1312] http://www.msp.gov.mt/services/subpages/content.asp?id=72&heading=History, accessed 20 December 2007.
[1313] Abela A. M., Cordina G., Muscat Azzopardi N. (2003), p. 31.
[1314] http://www.msp.gov.mt/services/subpages/content.asp?id=72&heading=History, accessed 20 December 2007.
[1315] *Social Security in Malta – A Synopsis* (2006), p. 12.
[1316] Abela A. M., Cordina G., Muscat Azzopardi N. (2003), p. 31.

pension not exceeding MTL2,600 a year, i.e. the amount of the minimum remuneration in the economy. Within this group, 21% of people aged over 75 were on the verge of poverty[1317]. Also in 2000, the deficit of the pension system including the expenses for pension contributions paid from budget resources reached MTL12 million, and without the state grant – MTL65 million[1318]. In 2002 a maximum pension amounted to MTL4,400 a year, which corresponded to previous yearly earnings of MTL6,600[1319]. On 1 October 2002, a new legal solution was introduced (the Special Funds [Regulation] Act)[1320], which allowed for accumulating pension money in special pension funds. This marked the beginning of the 3rd pension pillar[1321], and may have prepared the ground for the functioning of the 2nd pillar. In 2004 the World Bank issued a report on the current state and future challenges of the Maltese pension system[1322]. The report suggested increasing the retirement age for both sexes to 65 years and establishing the 2nd pension pillar. In November 2004 Maltese government prepared a special document devoted to pensioners (*The White Paper*)[1323], which suggested setting up the 2nd pension pillar in Malta. In 2004 the minimum guaranteed pension within the contributory scheme amounted to MTL46.15 a week[1324]. The Pension Working Group appointed on 30 June 2005 presented a report on the necessary changes in the existing pension system and recommended the following[1325]:

- to determine the level of the Minimum Pension Guarantee at 50% of the average remuneration of MTL2,421 a year, automatically indexed

1317 *National Strategy Report on Pensions. MALTA* (2005), p. 7.
1318 Abela A. M., Cordina G., Muscat Azzopardi N. (2003), p. 50.
1319 Abela A. M., Cordina G., Muscat Azzopardi N. (2003), p. 39.
1320 http://docp.justice.gov.mt/lom/legislation/english/leg/vol_14/chapt450.pdf, accessed 20 December 2007.
1321 http://www.mfsp.gov.mt/pensions/, accessed 18 December 2007.
1322 Schwarz A., Musalem A., Bogomolova T. (2004).
1323 http://www.mfsp.gov.mt/pensions/documents/whitepaper/wp_layout.pdf, accessed 18 December 2007.
1324 *National Strategy Report on Pensions. MALTA* (2005), p. 6.
1325 http://www.mfsp.gov.mt/pensions/documents/frpensions.pdf, accessed 20 December 2007.

with the 70% index accounting for the increase in remunerations, and 30% accounting for the inflation increase,
- to determine the same index for all of the already granted pensions,
- to implement gradually, until the year 2027, a uniform retirement age for white-collar workers of both sexes, i.e. 65 years, equalizing the retirement age of men and women at 61 years from 1 January 2007,
- to enable early retirement at the age between 61 and 65 with the loss of 6% of the pension for each year of early retirement,
- to increase in the future the limit of the yearly income subject to contributions to MTL10,000, and from 1 January 2007 to MTL9,000,
- to finance from the budget pension contributions of those who begin university education at over 30 years old,
- to increase gradually, until the year 2027, the period required for a full contributory pension to 40 years,
- to increase gradually, until the year 2027, the period considered when calculating pension amount to 10 best years out of 20 years before the retirement,
- to commence the work of the Malta Financial Services Authority aiming at the early implementation of the obligatory 2$^{nd}$ pillar based on the 2002 Special Fund (Regulation) Act with the suggested contribution amount (from 1 January 2007) of 1% paid by the employee and the self-employed person, and 1% paid by the employer; the contribution paid to the 2$^{nd}$ pillar is expected to reach the level of 4% paid by the employer and the employee by 2025, and the yearly income subject to pension contributions for the 2$^{nd}$ pillar was estimated at MTL15,000.

In 2005 the non-contributory pension for a lone pensioner amounted to MTL37.09 a week[1326]. The Act[1327] signed by the President on 7 December 2006 introduced significant parametric changes in the pension system as

[1326] *National Strategy Report on Pensions. MALTA* (2005), p. 8.

[1327] http://www.parliament.gov.mt/information/Acts/Act%2006_019%20-%20Bill%20076%20-%20Social%20Security.pdf, accessed 20 December 2007.

of 1 January 2007 following the recommendations of the Pension Working Group concerned with the following[1328]:

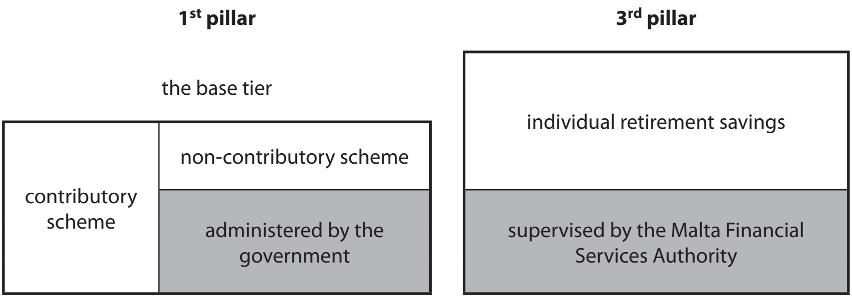
- the retirement age for women increased to 61 years,
- the limit of the yearly income subject to paying pension contributions set at MTL6,958, with the possibility of its increase to MTL9,000 in 2014.

### 2.18.3 The present state of the pension system in Malta – as of 31 December 2007

Presently the pension system in Malta consists of two pillars[1329]: 1) the 1st pillar and 2) the 3rd pillar. The 2nd pillar, i.e. the schemes related to employment, have been nonexistent in Malta since 1979. The present state of the pension system in Malta is presented in **Scheme no. 18**.

**Scheme no. 18**

**The present state of the pension system in Malta**




Source: Own elaboration.

The base tier, characteristic of **the 1st pillar**, comprises two schemes: a) contributory, and b) non-contributory scheme. The pension system functions on the basis of the pay-as-you-go principle, which means that contributions are allocated directly for pensions for those receiving

[1328] Sammut J. M. (2007).

[1329] Abela A. M., Cordina G., Muscat Azzopardi N. (2003), pp. 37 and further.

pension benefits. The pension system encompasses pension benefits, widow's benefits, disability pensions and health care benefits.

The most popular scheme is **the contributory scheme**, commonly called the two-thirds contributory scheme, which covers all the employed and self-employed between 14 and 65 years of age, even if they have reached the retirement age but earn more than the minimum remuneration[1330]. Pension contributions are paid by the employers, the employees and the government. In the case of hired workers, pension contribution (Class I Contribution) amounts to 30% of their gross remuneration, paid in equal shares, i.e. 10%, by the government from budget resources, by the employer and the employee. In the case of the self-employed, a yearly pension contribution paid by the participant in the system (Class II Contribution) comes to 15% of the yearly income, and the additional contribution paid by the government equals 50% of that amount[1331]. Pension contributions are calculated from remunerations or income not exceeding 133% of the average earnings[1332], i.e. from the income not exceeding MTL6,958 a year[1333]. The system allows for the minimum contribution of MTL5.79 paid weekly by the employee, and the same contribution paid by the employers, as well as for a permanent contribution for people under 18 years old – MTL2.84 a week. The maximum contribution amounts to MTL13.38 paid by both the employer and the employee. The weekly contribution for the self-employed falls between MTL10.20 and MTL20.07, depending on their income. With the yearly income not exceeding MTL2,908, the contribution has the permanent value of MTL8.39 a week[1334]. The retirement age is 61 years for both sexes[1335]. The scheme allows pensioners under 65 years old to

1330 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 213.

1331 The contribution share financed by the government is called a State Grant. Cf.: *National Strategy Report on Pensions. MALTA* (2005), p. 2.

1332 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 80.

1333 http://www.parliament.gov.mt/information/Acts/Act%2006_019%20-%20Bill%20076%20-%20Social%20Security.pdf, accessed 20 December 2007.

1334 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 213.

1335 Sammut J. M. (2007).

work, and the pension they receive is not lowered to the level of yearly remunerations not exceeding MTL3,000 a year. At the same time, the person who has passed the retirement age does not pay contributions from the income not exceeding the minimum remuneration. Furthermore, after turning 65, pension contributions are not required, irrespective of the amount of the received income. In order to be entitled to a full contributory pension it is required to pay contributions for 30 years, including the last 9 years before the retirement[1336], i.e. on average 50 weekly contributions per year[1337]. In the case of hired workers, pension amount is calculated on the basis of the earnings for the best three years in the last ten years before the retirement. In the case of self-employed people the period of pension calculation is extended to five years. The determined pension amount is indexed every year with the growth of income the sector where a given pensioner used to work. The scheme allows for the minimum and maximum pension[1338]. The interrelation between these two values is that the minimum pension constitutes about 40% of the maximum pension. Moreover, pensioners are entitled to a special bonus of MTL58[1339] they receive every six months. Pensions for people who paid contributions only before 22 January 1979 vary from MTL41.95 to 89.37 a week[1340].

Within **the non-contributory scheme** social benefits are financed from budget resources. Such a pension benefit is granted to people who turned 60 and do not meet the minimal requirements entitling them to receiving the contributory pension[1341]. The amount of a non-contributory

[1336] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 80.

[1337] *National Strategy Report on Pensions. MALTA* (2005), p. 7.

[1338] The minimum pension is determined as 4/5 of the minimum remuneration for married couples and 2/3 of the minimum remuneration for lone pensioners. Cf.: *National Strategy Report on Pensions. MALTA* (2005), p. 8.

[1339] Abela A. M., Cordina G., Muscat Azzopardi N. (2003), p. 31.

[1340] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 214.

[1341] *National Strategy Report on Pensions. MALTA* (2005), p. 8.

pension benefit is fixed for a given year and indexed annually according to inflation rate[1342]. The system is administered by the government.

**The 3rd pillar** of the pension system, i.e. individual retirement savings, is at the initial stage of development and has so far been insignificant for the practical studies. Formal requirements impose that the scheme should be managed by a managing institution (the Retirement Scheme Administrator) of a retirement fund. The retirement fund may be run within the defined contribution (DC) formula or a defined benefit (DB). In the case of the latter, an actuarial calculation of pension contributions is required[1343]. The existing retirement funds invest the accumulated resources in foreign markets. This is due to the small size of Maltese economy and the lack of possibility to properly diversify the securities portfolio. Malta lacks tax incentives for individual retirement savings. The institutions functioning within the 3rd pillar are supervised by the Malta Financial Services Authority[1344].

On the other hand, in Malta we deal with the so-called top-up pension[1345], i.e. the benefit paid to people receiving their pensions outside the social security system. The instalments of the benefits paid within this solution are slightly higher than the pensions received within the two-thirds scheme.

### 2.18.4 Challenges and planned changes in the pension system in Malta

The most important challenge that the pension system in Malta needs to face are the demographic changes. It is estimated that in 2065 the number of those who have reached the retirement age will be close to 26.1% of the

[1342] In 2006 the pensions equalled MTL36.05 a week for a lone pensioner, MTL46.40 a week for retired married couples, and MTL28.39 a week for the pensioner whose spouse is not retired. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 214.

[1343] *National Strategy Report on Pensions. MALTA* (2005), pp. 15 and 16.

[1344] http://www.mfsa.com.mt/mfsa/default.asp, accessed 18 December 2007.

[1345] Abela A. M., Cordina G., Muscat Azzopardi N. (2003), p. 37.

population[1346]. In 2050 for every 100 people paying pension contributions there will be slightly more than 74 pensioners[1347]. This poses a serious threat to the stability of the Maltese pension system in the future. Already in 2011 the budget share in pension contributions, which at present amounts to 10% in the case of the employed people, will no longer be sufficient for retaining system solvency[1348]. It also seems necessary to improve the payment of pension contributions, which at the moment reaches 78%[1349]. The estimated yearly deficit of the pension system in 2065 may come to as much as MLT572.8 million without the state grant[1350]. Despite the fact that the report of the special pension working group of 30 June 2005[1351] suggested the implementation of parametric and system changes as of the beginning of 2007, the review prepared by the Maltese government in July 2005 indicated only the following activities as the most important future objectives[1352]:

- the increase in the retirement age to 65 years,
- the indexation of pension benefits according to the retail price index,
- the indexation of the minimum guaranteed pension according to the inflation rate,
- the prolongation of the obligatory contribution period to 40 years,
- the indexation of the maximum income requiring paying the contributions according to the retail price index,
- financing budget share in pension contributions for people continuing their education or taking care of small children.

As we can see, the predictions are only limited to parametric reforms, without introducing any radical changes to the system. The government's reluctance to implement system changes is most commonly explained with the opposition party blocking any reformatory activities[1353].

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1346 Abela A. M., Cordina G., Muscat Azzopardi N. (2003), p. 44.
1347 *National Strategy Report on Pensions. MALTA* (2005), p. 5.
1348 Schwarz A., Musalem A., Bogomolova T. (2004), p. 4.
1349 Abela A. M., Cordina G., Muscat Azzopardi N. (2003), p. 47.
1350 Abela A. M., Cordina G., Muscat Azzopardi N. (2003), p. 50.
1351 http://www.mfsp.gov.mt/pensions/documents/frpensions.pdf, accessed 20 December 2007.
1352 *National Strategy Report on Pensions. MALTA* (2005), pp. 13 and 14.
1353 Spiteri Paris A. (2006).

### 2.18.5 Summary

The pension system in Malta is a characteristic mixture of Biscmarck's contributory solution and Beveridge's social solution. The complete lack of the 2nd pillar and the poor development of the 3rd pillar of the pension system seem to stem from a very slow development of the capital markets. In the adopted system solution, the fate of the pensioners is fully dependent on the decision of politicians on contribution amounts as well as the received pension benefits. The fact that a part of pension contributions is paid from budget resources ensures the present system stability, which would otherwise be impossible to achieve. It seems that the introduction of the 2nd pillar suggested by the World Bank[1354] with the possibility of investing the resources in capital markets, mostly foreign ones, will be indispensable for retaining the system stability in the future.

What is interesting for international comparisons is the fact that in Malta there is a complete lack of alternative pension systems for particular professional groups apart from the general pension system.

## 2.19 THE NETHERLANDS

### 2.19.1 General information about the country

The Netherlands, or, to be correct, the Kingdom of the Netherlands[1355] (*Koninkrijk der Nederlanden*) is a country in northern Europe situated on the North Sea, comprising 12 provinces (*provincies*) and 2 autonomous territories (*landen binnen*): the Netherlands Antilles and Aruba.

The official language of the whole country is Dutch. In Friesland the official language is also Frisian. The largest ethnical group were the Dutch (83% of the population). Among the remaining 17% of the population, 9% were of non-European origins, mainly the Turks, Moroccans, Antilleans, Surinamese, and Indonesians. Among the population of the

[1354] Schwarz A., Musalem A., Bogomolova T. (2004).
[1355] *Wielka Encyklopedia PWN* (2002), v. 11, pp. 406 and further.

Netherlands 41% people were the atheists. The largest religious groups were the Catholics (31% of the population), then protestants of the Dutch Reformed Church (13%), the Calvinists (7%), and the followers of Islam (5.5% of the population).

According to the Constitution of 1815 the head of the state is the King[1356], and the government is led by the Prime Minister.

In 1949 the Netherlands joined the NATO and in 1957 the European Economic Community. In 1999 the Netherlands joined the Economic and Monetary Community and replaced the Dutch gulden with the euro[1357].

The current currency in the Netherlands is the euro.

The GDP *per capita* (PPP) was estimated in 2007 at US$38,600, with a growth rate of 2.8%, and the public debt 47.7% of the GDP; the current national balance at the end of 2007 showed the surplus of US$59.28 billion.

The unemployment rate was 4.5%.

In July 2007 the population of the Netherlands was 16,570,613 people[1358] with the following age groups: 0-14 years of age – 17.8%, 15-64 years of age – 67.8 %, 65 years of age and older – 14.4%. The overall life expectancy at birth was 79.11 years, 76.52 years for men, and 81.82 years for women.

### 2.19.2 Historic development of the pension system in the Netherlands

The first voluntary company pension scheme for railwaymen appeared in the Netherlands as soon as in the middle of the 19th c.[1359]. The first legal regulation on pensions[1360] and accident insurance[1361] appeared

[1356] At present – since 30 April 1980 – Queen Beatrix.

[1357] Dutch guldens (NLG) were converted into the euro (EUR) at the exchange rate of NLG2.20371 per EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 31 March 2008.

[1358] https://www.cia.gov/library/publications/the-world-factbook/geos/nl.html, accessed 31March 2008.

[1359] Anderson K. M. (2007), p. 725.

[1360] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 231.

[1361] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 234.

in **1901**. In 1913 the act on disability was passed and introduced the obligatory social insurance, including pension insurance[1362]. Next, in 1919, a new law on general voluntary old age insurance appeared[1363]. In 1922 the principles concerning the collection of contributions and paying pensions to state administration workers were defined, and an industrial pension fund was set up (*Algemeen Burgerlijk Pensioenfonds*, ABP)[1364]. In 1923 a public supervisory institution dealing with insurance was established (*Verzekeringskamer*, VK)[1365]. In 1929 a complex legal regulation on pensions for civil servants appeared[1366]. In 1931 the first legal regulation on health insurance was passed[1367]. In 1938 there were over 750 company pension funds functioning in the Netherlands, with over 50 participants in each[1368]. In 1939 the law on family benefits was introduced[1369]. A three-pillar pension system was constructed in the Netherlands right after World War II[1370]. First, in 1947, a temporary act was passed which guaranteed non-contributory pensions for all the citizens, and similar in its logic to the British social security principle of Beveridge. This marked the beginnings of the 1st pillar. Next, in 1949, an act on mandatory participation in an industrial pension fund was passed (*Wet bettreffende de verplichte deelneming in een bedrijfspensioenfonds*, Bpf)[1371], which marked the beginnings of the 2nd pension pillar. In the same year the first law on unemployment appeared[1372]. In 1952 the Social Security Council was appointed (*College van Toezicht Sociale Verzekeringen*, CTSV), and on the basis of the act on pensions and savings

[1362] Anderson K. M. (2007), p. 724.
[1363] Zieliński P. (2004), p. 170.
[1364] van Riel B., Hemerijck A., Visser J. (2005), p. 67.
[1365] http://www.dnb.nl/dnb/home/about_dnb/organisation/history/en/47-150200-64.html, accessed 10 November 2007.
[1366] Zieliński P. (2004), p. 170.
[1367] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 233.
[1368] Anderson K. M. (2007), p. 725.
[1369] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 235.
[1370] Kremers J. J. M. (2002), p. 291.
[1371] Anderson K. M. (2007), p. 728.
[1372] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 234.

(*Pensioen- en spaarfondsenwet*, PSW)[1373] the public insurance supervision (VK) was enhanced to cover pensions and changed its name into *Pensioen- & Verzekeringskamer* (PVK)[1374]. In 1956 the Social Security Bank was established (*Sociale Verzekeringsbank*, SVB), and became responsible for administering the base pension scheme. On 1 January 1957, a new legal regulation on general pensions came into being (*Algemene Ouderdoms Wet*, AOW). It concerned the 1st pillar and pension indexation[1375]. The act determined the maximum contribution level on the AOW at 6.75% of the income[1376]. In 1963 the law on family benefits was amended[1377]. In 1964 the law on medical care was amended, and in 1966 the law on sickness insurance[1378]. In 1967 the separate regulation on accident insurance was abolished[1379]. In 1969 an industrial fund for health protection workers was set up (*Pensioenfonds voor de Gezondheid, Geestelijke en Maatschappelijke belangen*, PGGM). In 1975 the 2nd pillar for the first time allowed for insurance concerned with earlier retirement (*Vervroegde UitTreding*, VUT). In 1981 the amount of contribution on the AOW was increased to 8.0%[1380]. In the 1980s the 2nd pillar allowed for earlier retirement available for those who turned 55. In 1985 individual benefits from the AOW for the relatives of pensioners were introduced[1381]. In 1986 the report of the so-called Drees Commission on the future of pensions in the Netherlands was issued[1382]. On 1 January 1987, pension rights of extramarital couples of the same or different sex living together for a longer time were equalised with the rights of married couples[1383]. In the same year the unemployment

1373 van Riel B., Hemerijck A., Visser J. (2005), p. 67.
1374 http://www.dnb.nl/dnb/home/about_dnb/organisation/history/en/47-150200-64.html, accessed 10 November 2007.
1375 Anderson K. M. (2007), p. 725.
1376 Anderson K. M. (2007), p. 732.
1377 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 235.
1378 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 233.
1379 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 234.
1380 Anderson K. M. (2007), p. 732.
1381 Anderson K. M. (2007), p. 730.
1382 The name of the Commission comes from the name of its speaker – Willema Drees. Cf.: Anderson K. M. (2007), p. 732.
1383 Zieliński P. (2004), p. 171.

law was amended[1384]. In 1989 contribution on the base system amounted to 10.8%, which allowed to finance 98.8% of the pension fund revenue[1385]. Since 1 January 1990, contributions on the base system have been paid directly by the employees and the self-employed, and paid with individual income tax. In 1992 new principles on pension indexation were introduced (*de Wet koppeling met afwijkingsmogelijkheid*, WKA)[1386], and made the increase in pension amounts dependent on the increase in remunerations and the condition of the labour market[1387]. In 1994 a legal regulation on the possibility of transferring resources accumulated in the 2nd pillar to a different fund in the situation when the employee changed his or her place of work[1388]. In the mid-1990s, the 2nd pillar covered 85% of employees in the Netherlands[1389]. In 1996 the industrial pension fund for state administration workers (ABP) was privatised[1390]. In 1997 maximum contribution amount on the AOW was set at 16.5% of the remuneration[1391]. In 1998 the so-called AOW-Fund was established, i.e. a virtual fund based on budget resources, which aimed at financing the anticipated deficit of the pension system in the years between 2020 and 2050[1392], and the amount of the highest possible contribution to the AOW was determined for the period until the year 2020 at the level of 18.25%[1393]. Any possible deficits of the system were to be financed from the AOW-Fund. In 2000 pension contribution in the 1st pillar equalled 17.9% of the remuneration[1394]. On 1 January 2001, there were 916 pension funds in the Netherlands, 38 of which were private limited companies, one

[1384] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 234.
[1385] Zieliński P. (2004), p. 189.
[1386] van Riel B., Hemerijck A., Visser J. (2005), p. 66.
[1387] Anderson K. M. (2007), p. 730.
[1388] Zieliński P. (2004), p. 178.
[1389] Kremers J. J. M. (2002), p. 296.
[1390] van Riel B., Hemerijck A., Visser J. (2005), p. 67.
[1391] Anderson K. M. (2007), p. 730.
[1392] Kremers J. J. M. (2002), p. 293.
[1393] *2005 National Strategy Report on Adequate and Sustainable Pensions: The Netherlands* (2005), p.11.
[1394] de Vos K., Kapteyn A. (2004), p. 463.

was a public limited company and three were assotiations. The remainder all had the legal form of the foundation (*stichtingen*)[1395]. In 2002 full pension from the 1st pillar for a lone pensioner amounted to €869.24 per month[1396], for two people living together – €1,214 per month[1397]. On 1 January 2003, the number of pension funds registered in the Netherlands equalled 858[1398], and the value of pension contributions paid to those funds only in 2003 equalled €9.6 billion[1399]. In 2004 the PVK was taken over by the Dutch National Bank (*De Nederlandsche Bank*, DNB), which supervised the functioning of the pension funds[1400]. At the end of 2004 the resources accumulated in life insurance institutions within the 1st and 2nd pillar amounted to €327 billion, whereas the value of the assets of the Dutch pension funds of the 2nd pillar reached €539 billion[1401]. In the same year the AOW scheme paid pensions to 2.4 million pensioners, and in January 2005 full pension paid from the 1st pillar to a lone pensioner amounted to €930.17 gross per month[1402]. From 1 January 2006, the contribution paid to the VUT was no longer deducted from income tax[1403], and instead the possibility of voluntary savings within the 2nd pillar in the form of life cycle savings was introduced (*levensloopregeling*). This scheme allowed for the accumulation of savings, with tax reductions reaching 12% of the yearly income before tax, with the intended use on education, academic leave, in the situation of the death of one's parents, and early retirement[1404]. In 2006 full pension from the 2nd pillar paid to a lone

1395 Maatman R. (2004), p. 129.
1396 Zieliński P. (2004), p. 183.
1397 van Riel B., Hemerijck A., Visser J. (2005), p. 66.
1398 Maatman R. (2004), p. 1.
1399 Anderson K. M. (2007), p. 727.
1400 http://www.dnb.nl/dnb/home/news_and_publications/dnb_publications/dnb_working_papers_series/pvk_reports/en/47-152163-64.html, accessed 10 November 2007.
1401 *2005 National Strategy Report on Adequate and Sustainable Pensions: The Netherlands* (2005), p.19.
1402 Anderson K. M. (2007), p. 726.
1403 *2005 National Strategy Report on Adequate and Sustainable Pensions: The Netherlands* (2005), p. 3.
1404 http://nl.wikipedia.org/wiki/Levensloopregeling, accessed 17 November 2007.

pensioner amounted to €932.67 gross per month[1405]. On 1 January 2007, a new law on the functioning of the 2nd pension pillar came into being. This law introduced the term of 'pension administrator' and eliminated the distinction between a pension fund and an insurance institution, set clear requirements for determining pension scheme indexation, required pension schemes to use the principles of proper management (*Stichting van de Arbeid*), introduced the obligation to inform the newly-employed about the pension system and lowered the age of joining pension schemes from 25 to 21 years[1406].

### 2.19.3 The present state of the pension system in the Netherlands

The Dutch pension system is composed of three pillars[1407]: 1) the base pension scheme financed by the state, 2) the mandatory complimentary scheme of collective contributory pension, and 3) the voluntary individual pension scheme. The present state of the pension system in the Netherlands is presented in **Scheme no. 19**.

**Scheme no. 19**

**The present state of the pension system in the Netherlands**

| **1st pillar** | **2nd pillar** | **3rd pillar** |
|---|---|---|
| the base pension scheme financed by the state based on the pay-as-you-go principle *Algemene Ouderdoms Wet*, AOW<br>managed by the Social Security Bank *Sociale Verzekeringsbank*, SVB | the mandatory complimentary scheme of collective contributory pension | the voluntary individual pension scheme |

Source: Own elaboration.

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[1405] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 232.

[1406] http://www.ssa.gov/policy/docs/progdesc/intl_update/2007-02/2007-02.html, accessed 17 November 2007.

[1407] Kremers J. J. M. (2002), p. 291.

**The base pension scheme financed by the state** (AOW) is a scheme based on the pay-as-you-go principle and managed by the SVB. Contributions within this scheme are paid by all the people at the level of 17.90% of the income, but only within the first two tax ranges[1408]. Contributions are also paid by pensioners. Contributions are transferred to the central budget and this is where pensions are paid from. Full pension paid from this scheme to a lone pensioner constitutes 70% of the minimal remuneration[1409]. The retirement age is set at 65. Benefits are available to all those who between 15 and 65 years old lived in the Netherlands[1410]. There is no requirement of working in that period. A resident paying his or her contributions for 50 years is entitled to full pension, from which 2% for each year not covered by the insurance is subtracted[1411]. The base scheme does not allow for early retirement. On the other hand, a retired person is allowed to work without any limits[1412]. Pensions undergo indexation twice a year, from 1 January to 1 July, according to the average income growth rate[1413]. Pensions are taxed based on general rules, and additionally pensioners pay health premiums and contributions for the pensions of widows and widowers that amount to the total of 11.5% of the income[1414].

**The mandatory complimentary scheme of collective contributory pension** is realised through allocating the accumulated contributions in pension funds or life insurance institutions, called pension administrators. In spite of investing the accumulated resources in capital markets, over 99% of pension schemes within the 2$^{nd}$ pillar are the defined benefit (DB) systems, where the pension calculation base is the remuneration

1408 In 2006 the upper limit of income subject to contributions amounted to €29,543 a year. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 231.
1409 Kremers J. J. M. (2002), p. 297.
1410 Zieliński P. (2004), p. 173.
1411 Zieliński P. (2004), p. 181.
1412 Mastrogiacomo M. (2005), p. 228.
1413 Since 1 July 2007, pensions paid from the AOW to a lone person have been equal to €964.91. Cf.: http://internationalezaken.szw.nl/index.cfm?fuseaction=dsp_rubriek&rubriek_id=391031, accessed 17 November 2007.
1414 Whitehouse E. (2007), p. 98.

level[1415]. Pension funds may be on the company level (*ondernemings pensioenfonds*) or the industrial level (*bedrijftakspensioenfonds*)[1416]. Participation in the scheme is obligatory for all the employees, even if the employers additionally offer a company pension scheme. The basic formula of functioning of the 2nd pillar consists in industrial pension funds participated by about 80% of employees[1417]. The scheme includes pension insurance, pensions for widows and widowers, pensions for life partners, orphan benefits, disabled benefits, bachelor benefits, temporary pensions, family benefits, benefits for large expenses, and it also allows for accumulating resources on the scheme of life cycle savings. From the offered catalogue, the pension insurance and the insurance in case of premature death are mandatory. About 75% of the participants are also insured against disability. Many people insure themselves within the so-called VUT, which allows for early retirement. Almost 80% of pension scheme participants take advantage of this solution[1418]. Contributions within the scheme are determined individually and depend on statutory agreements and the options selected by the participant. On average it does not exceed 2% of the remuneration, as this is the level exempt from the income tax, however, in the case of people still working although they are over 65 years old or retiring before reaching the age of 60 it may even amount to 100% of the remuneration. Most commonly the contribution is paid in half by the employee and in half by the employer. However, certain solutions make it possible for the employer to cover the entire contribution. Contributions as a whole are invested in capital markets. There are no investment restrictions, except for the prohibition of allocating more than 5% of the assets in the shares of the company sponsoring the pension scheme[1419]. The pension amount for a person who worked for 40 years typically equals 70% of the remuneration[1420], including payouts from the

[1415] de Vos K., Kapteyn A. (2004), p. 464.
[1416] Anderson K. M. (2007), p. 728.
[1417] Kremers J. J. M. (2002), p. 298.
[1418] Mastrogiacomo M. (2005), p. 229.
[1419] Maatman R. (2004), p. 224.
[1420] de Vos K., Kapteyn A. (2004), p. 464.

AOW[1421]. In the recent years more and more funds have been departing from the formula of referring the pension calculation base from the level of the last remuneration to the level of the average remuneration[1422]. The funds usually offer an investment return rate at the level of 1.75% to 2.00% a year[1423]. Obligatory contributions and all the earnings of the fund are exempt from paying the income tax, however, payouts of the accumulated resources are taxed. So, within the taxation system, the so-called EET system is functioning[1424]. Payouts from the scheme are possible after reaching 60 years of age[1425]. However, early retirement in the 2nd pillar, before 65 years old, means that the benefits are lowered actuarially. Pension funds are exempt from corporate income tax. Life insurance institutions pay corporate income tax. The largest fund present in the market is the industrial pension fund for state administration workers (ABP)[1426], the second is the industrial fund for health protection workers (PGGM)[1427]. Among the funds run by companies, the largest is the Philips pension fund[1428]. 91% of the employed are the participants of the pension solutions within the 2nd pillar[1429], whereas pensions from the 2nd pillar are paid to 82% of the pensioners[1430].

**Voluntary individual pension scheme** consists in allocating owned resources in pension plans offered by life insurance institutions.

1421 Anderson K. M. (2007), p. 729.
1422 *2005 National Strategy Report on Adequate and Sustainable Pensions: The Netherlands* (2005), p. 11.
1423 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 84.
1424 The form of taxation of pension schemes where contributions are exempt from paying taxes, investment income and capital gains of the pension funds are also exempt from taxes, but the paid pension benefits are taxed.
1425 Zieliński P. (2004), p. 177.
1426 In the case of this fund, 1/3 of the value of pensions comes from contributions, and 2/3 is the result of investments in capital markets. Cf.: Maatman R. (2004), p. 38.
1427 van Riel B., Hemerijck A., Visser J. (2005), p. 67.
1428 Maatman R. (2004), p. 1.
1429 Whitehouse E. (2007), p. 98.
1430 *2005 National Strategy Report on Adequate and Sustainable Pensions: The Netherlands* (2005), p. 9.

Contributions to pension plans are to a certain limit exempt from income tax of physical persons[1431], and the entire scheme functions on the EET basis, similarly to the 2nd pillar. The scheme allows also for single payouts, as well as for paying life pensions. The participants of the 3rd pillar are most commonly self-employed people, who cannot participate in the 2nd pillar[1432].

### 2.19.4 Challenges and planned changes in the pension system in the Netherlands

The most important challenge that the pension system in the Netherlands is facing is the demographic situation. It is anticipated that in 2035 the participation of people over 65 years of age in the population will reach 24%[1433], and in 2050 the number of people over 65 will constitute 40% of the number of people in the productive age[1434]. This may have a particularly large influence on the functioning of the AOW scheme. The result may be the necessity to increase the amount of contributions paid to the AOW to 23% in 2030, or to introduce a 50% reduction in the paid benefits. Already the 1986 Report of the Drees Commission indicated the necessity of introducing the following changes to the functioning of the AOW: introducing an mandatory contribution for all the pensioners, increasing or abolishing the limits of paying contributions, increasing the retirement age, and lowering the amounts of pension benefits[1435]. In the 2005 Report prepared by the Dutch government, the main challenges for the Dutch pension system included[1436]:

- the change in pension indexation in the AOW into the reference to the growth in the costs of living from the previous reference to the growth of salaries,

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[1431] Kremers J. J. M. (2002), p. 300.

[1432] *2005 National Strategy Report on Adequate and Sustainable Pensions: The Netherlands* (2005), p. 8.

[1433] de Vos K., Kapteyn A. (2004), p. 461.

[1434] Kremers J. J. M. (2002), p. 292.

[1435] Anderson K. M. (2007), p. 732.

[1436] *2005 National Strategy Report on Adequate and Sustainable Pensions: The Netherlands* (2005), p. 5.

- the necessity of an improved distribution of the costs concerned with the financing of pensions for the employed and the pensioners,
- the necessity to extend the actual period of professional activity,
- the necessity to adjust financial strains of the system to the requirements of the euro zone concerned with public finances,
- the necessity to notice international references of the Dutch pension system,
- the necessity to adjust the pension system to the changing labour market with the growing participation of people employed part-time in several places,
- the necessity to increase pension awareness of the participants in the system.

The same document enlisted three elements as dangerous to the stability of the pension system: the uncertainty concerned with the durability of the economic growth, the possibility of longer than expected life expectancy, or possible changes in regulations issued by the European Union[1437].

### 2.19.5 Summary

Pension system in the Netherlands is efficient in providing for older people. The system comprises a supply element in the form of the AOW scheme, and a capital element, in the form of company and industrial pension funds. These two mandatory pillars are supplemented by a voluntary scheme of individual pension savings. The supply element is related to the philosophy of Beveridge, treating pension benefits as the right connected with reaching a certain age, without the necessity of accumulating pension resources in advance. The supply element is efficiently complimented with a capital pillar related to employment and paying contributions to pension funds. The resources accumulated in pension funds allowing for the financing of the capital pillar, as well as the possibilities of the budget itself within the supply element, allow to optimistically evaluate the future perspectives of the Dutch pension system.

[1437] *2005 National Strategy Report on Adequate and Sustainable Pensions: The Netherlands* (2005), p. 27.

What in international comparisons appeared an interesting solution is the possibility to voluntarily participate in a large variety of additional subsystems within the capital scheme, and the existence of a life cycle savings plans.

## 2.20 POLAND

### 2.20.1 General information about the country

The Republic of Poland[1438] (*Rzeczpospolita Polska*) is a country located in central Europe, on the Baltic Sea, comprised of 16 regions (*województwa*).

The official language is Polish. The largest ethnic group were the Poles (96.7% of the population); the largest ethnic minority were the Germans, who accounted for 0.4% of the population. The largest religious group were the Catholics (89.8% of the population), then the Orthodox – 1.3%.

According to the Constitution of the country (accepted in 1997), the head of the state is the President, and the government is led by the Prime Minister.

On 12 March 1999, Poland became the member of the NATO, and on 1 May 2004 – the member of the European Union.

The currency in Poland is the zloty (PLN[1439], *złoty*).

The GDP *per capita* (PPP) was estimated in 2007 at US$16,200, with a growth rate of 6.5%, and the public debt was 44.5% of the GDP; the current national balance at the end of 2007 showed the deficit of US$18.13 billion.

The unemployment rate was 12.8%.

In July 2007 the population of Poland was 38,518,241 people[1440], with the following age groups: 0-14 years old – 15.5%, 15-64 years old – 71.1%,

[1438] *Wielka Encyklopedia PWN* (2004), v. 21, pp. 341 and further.

[1439] According to the ISO 4217 standard. On 31 December 2007, EUR1 was worth PLN3,5935. Cf.: http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-pln.en.html, accessed 21 February 2008.

[1440] https://www.cia.gov/library/publications/the-world-factbook/geos/pl.html, accessed 31March 2008.

65 years old and older – 13.3%. The overall life expectancy at birth was 75.19 years: 71.18 years for men and 79.44 years for women.

### 2.20.2 Historic development of the pension system in Poland

The beginnings of the Polish pension system date back to the annexations of Poland in the previous centuries and are connected to the legal regulations of the occupying countries. On the territories of the Austria-occupied part of Poland, in 1866 there was a legislation on pension payments to civil servants and soldiers. From 1891 in the Prussian part of Poland, the German law of 1889 came into force, which concerned pension insurance connected with old age and disability. In the Russian part of Poland, there was no a complete legislation on pensions, apart from the Zagłębie Dąbrowskie Region, where each mine had its own brethren's insurance institution. In 1911 the German Insurance Act of the Reich concerning social insurance became valid on the territory of the Prussia-occupied part of Poland[1441]. In 1920 the first legislation on health insurance was introduced[1442]. In 1923 the Pension Act for Civil Servants and Professional Soldiers was enacted[1443], and in 1924 the Act on Giving Voluntary Donations (*Ustawa o przyznawaniu darów z łaski*)[1444]. Also 1924 saw the first legislation concerning unemployment[1445]. In **1927** the first Polish comprehensive regulation took place, in the form of a regulation on the social security of white-collar workers[1446]; it also lied down the rules of the old-age income security. The insurance contribution was paid by the employer and the employee, with the latter's share increasing in relation to the rise in remunerations from 0% to 60%[1447]. Pursuant to the Act, the White-Collar Workers Insurance Institution was set up in Warsaw, which was

[1441] Rzegotka O., Sroka Ł. T. (2005).
[1442] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 248.
[1443] The Act of 11 December 1923 *On Providing Pensions to Civil Servants and Professional Soldiers*, Journal of Laws of 1924, No. 6, item 46.
[1444] The Act of 11 December 1924 *On Giving Voluntary Donations*, Journal of Laws of 1925, No. 2, item 12.
[1445] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 251.
[1446] The Regulation of the President of the Republic of Poland of 24 November 1927 *On Insurance of White-Collar Workers*, Journal of Laws of 1927, No. 106, item 911.
[1447] Wantoch-Rekowski J. (2005), pp. 30 and 31.

supposed to administrate the White-Collar Workers Pension Insurance Fund. 1928 brought the Law on Providing for Former Political Convicts[1448]. In 1934 the Act on Social Insurance of 1933 was implemented[1449], called 'the unification act'. It set the retirement age at 65, with the statutory provision that exceeding this age entailed the right to the benefit called the disability allowance[1450]. Pursuant to the Act, the Blue-Collar Workers Pension Insurance Institution was set up, which administered the Blue-Collar Workers Pension Insurance Fund. The 1934 amendment to this Act[1451] abolished *inter alia* the White-Collar Workers Insurance Institution and the Blue-Collar Workers Pension Insurance Institution, in the place of which it established the Social Security Institution (*Zakład Ubezpieczeń Społecznych*, ZUS), which took over managing *inter alia* the White-Collar Workers Insurance Fund and the Blue-Collar Workers Pension Insurance Fund. Still during World War II, in 1944, the new authorities decided on new acts of law on social insurance[1452], which abolished most of the provisions of the Act of 1933; the ZUS, however, was preserved, as well as pension funds for blue- and white-collar workers. In 1945[1453], a decree changed the method of collecting contributions by obliging employers to pay all contributions in full. In 1947 the first law on family benefits was enacted[1454]. In 1948[1455] the act was passed which decided on pensions

[1448] The Regulation of the President of the Republic of Poland of 6 March 1928 *On Providing for Former Political Convicts*, Journal of Laws of 1928, No. 27, item 245.

[1449] The Act of 28 March 1933 *On Social Security*, Journal of Laws of 1933, No. 51, item 396.

[1450] It can be thus assumed that the authorities regarded reaching the age of 65 as a reason to consider a person disabled, irrespectively of his or her actual condition.

[1451] The Regulation of the President of the Republic of Poland of 24 October 1934 *Ammending the Act of 23 March 1933 on Social Security*, Journal of Laws of 1934, No. 95, item 855.

[1452] The Decree of the Polish Committee for National Liberation of 7 September 1944 *On Temporary Local Governement Units in Social Insurance Institutions*, Journal of Laws of 1944, No. 5, item 24, and the Decree of the Polish Committee for National Freedom of 23 October 1944 *Amending the Act of 28 March 1933 on Social Security*, Journal of Laws, No. 9, item 44.

[1453] The Decree of 29 September 1945 *On the Producers' Payment of the Entire Contribution to the Social Insurance and Labour Fund*, Journal of Laws of 1945, No. 43, item. 240.

[1454] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 251.

[1455] The Decree of 14 April 1948 *On Benefits and Aid to Soldiers of the Polish Army, the Soldiers and Functionaries of the Public Security Service, Members of the Voluntary Reserve of the* provision for the soldiers of the Polish Army, the soldiers and the functionaries of the security service and the organization called the Voluntary Reserve of the Citizens' Police. In 1949 an act was passed[1456] that changed the rules of collecting social security contributions, which decided that there would be a single institution (ZUS) to manage a fund, which would collect all the contributions from health, accident, and pension insurance. In the Act of 1950[1457] on the Social Security Institution, it was stipulated that this institution will perform all duties regarding social security, except those entrusted with the Employees' Medical Care Institution. Moreover, all other funds connected with social security were closed down, and their capital was taken over by the ZUS[1458]. The income and expenditure of the ZUS were incorporated into the state budget, the supervision of which was granted to the Minister for Labour and Social Security. Furthermore, in 1950 a decree was passed[1459] that stipulated the abolition of the separate pension systems for the employees of the former local government organizations and the enterprises and factories that such organizations had owned. The decree was mostly aimed at the former local government officials from the areas taken over by the Soviet Union, the Free City of Gdansk and the former German Reich. By this decree, the employees of the former unions of local governments became members of the National Pension Institution. In 1951[1460] the contributions of various elements of social insurance were merged and the employer transferred one

*Citizens' Police, and Their Families*, Journal of Laws of 1948, No. 21, item 139.

[1456] The Act of 1 March 1949 *Amending Certain Regulations on Social Security*, Journal of Laws of 1949, No. 18, item 109.

[1457] The Act of 20 July 1950 *On the Social Insurance Institution*, Journal of Laws of 1950, No. 36, item 333.

[1458] These were: the Pension Insurance Fund for Blue-Collar Workers, the Pension Insurance Fund for White Collar-Workers, the Accident and Occupational Disease Insurance Fund, Sickness and Maternity General Fund, the Family Insurance Fund, the mutual insurance institutions, Spółka Bracka in Tarnowskie Góry and Kasa Bratnia Górników in Sosnowiec.

[1459] The Decree of 21 September 1950 *Abolishing the Separate Pension Systems for the Employees of the Former Unions of Local Government, Their Enterprises and Factories*, Journal of Laws of 1950, No. 44, item 407.

[1460] The Regulation of the Council of Ministers of 10 February 1951 *On the Amount of Social Security Contributions*, Journal of Laws of 1951, No. 9, item 70.

lump sum for the social insurance for every employee, which was 15.5% of the remunerations in the case of those employed in state enterprises and 18% for those employed in private institutions. Additionally, the private employers were obliged to pay family insurance for their employees at the rate of 12% of current wages. In the 1950s, social insurance contribution was equal to 15% of remunerations[1461]. The new law on universal pension security of employees[1462], which was introduced in 1954, closed down the National Pension Institution and changed the rules regulating the old-age income of military personnel[1463]. In 1955 the pension arrangements for the members of the internal security service[1464] changed again and for some time the ZUS[1465] was closed, its responsibilities being taken over by trade unions, except for pensions and provisions that fell under the authority of the Minister for Labour and Social Security and the executive committees of regional national councils. 1957 brought new pension arrangements for professional army personnel[1466] and the employees of the railway[1467], and in 1959[1468] – for the police. The ZUS was re-founded by the Act of 1960[1469] and became the legal successor of the Central Management of Social Security. The trade unions had to hand back to the re-founded ZUS all the management related to social

[1461] Hausner J. (2002), p. 349.

[1462] The Decree of 25 June 1954 *On Universal Old Age Pension Income of Employees and Their Families*, Journal of Laws of 1954, No. 30, item 116.

[1463] The Decree of 18 September 1954 *On Old Age Pension Income of Generals (Admirals), Professional Officers and Junior Officers and Their Families*, Journal of Laws of 1954, No. 41, item 181.

[1464] The Decree of 27 July 1955 *On Old Age Pension Income of the Members of the Public Security Services and Their Families*, Journal of Laws of 1955, No. 31, item 184.

[1465] The Decree of 2 February 1955 *On the Transfer of Social Security Responsibilities to Trade Unions*, Journal of Law of 1955, No. 6, item 31.

[1466] The Act of 13 December 1957 *On Old Age Pension Income of Professional and Part-time Soldiers And Their Families*, Journal of Laws of 1958, No. 2, item 6.

[1467] The Decree of 19 January 1957 *On Old Age Pension Income of the Employees of the Railway and Their Families*, Journal of Laws of 1957, No. 8, item 27.

[1468] The Act of 31 January 1959 *On Old Age Pension Income of the Members of the Citizens' Police and their Families*, Journal of Laws of 1959, No. 12, item 70.

[1469] The Act of 13 April 1960 *On the Creation of the Labour and Wages Committee and on the Changes of Authority in the Area of Social Security, Pensions, Provisions and Social Welfare*, Journal of Laws of 1960, No. 20, item 119.

security. In a similar way, the Minister for Labour and Social Security was no longer in charge of matters related to pensions and their provision. In 1965[1470] craftsmen were covered by a social security programme, for which a separate fund was created and placed under the ZUS's management. The Act of 1966[1471] set up a separate fund for the social security of 'certain social groups', which covered a number of those who so far had been covered by the social security arrangement for craftsmen[1472]; this fund was also managed by the ZUS. In 1968 the pension regulations for railway staff[1473] were changed and another act on the pension fund was passed[1474]. The major part of the fund's income was to come from collecting a part of the social security contributions paid by the employers. These contributions equalled 8.5% of the contribution calculation base; the fund's income also came from a newly-created contribution for pension purposes amounting to 3% of the calculation base, which was paid by the employees. In 1972 the regulations regarding the social insurance of craftsmen[1475] and army personnel[1476] were changed. In 1973[1477] old-age pensions were granted to artists and their families, in 1975[1478] to persons performing contracted jobs for state-owned enterprises, and in 1976[1479] to

[1470] The Order of the Council of Ministers of 19 June 1965 *On Creation of the Social Security Fund for Craftsmen*, Journal of Laws of 1965, No. 26, item 173.

[1471] The Order of the Council of Ministers of 28 December 1966 *On Creation of the Social Security Fund for Certain Social Groups*, Journal of Laws of 1967, No. 1, item 2.

[1472] The fund was created for those conducting business activities on their own account and for those who delivered contracted services to state-owned enterprises.

[1473] The Act of 23 January 1968 *On Old Age Pension Income of the Employees of the Railway and their Families*, Journal of Laws of 1968, No. 3, item 10.

[1474] The Act of 23 January 1968 *On Old Age Pension Fund*, Journal of Laws of 1968, No. 3, item 7.

[1475] The Act of 8 June 1972 *On Social Security of Craftsmen*, Journal of Laws of 1972, No. 23, item 165.

[1476] The Act of 16 December 1972 *On Old Age Pension Income of Professional Soldiers and their Families*, Journal of Laws of 1972, No. 53, item 341.

[1477] The Act of 27 September 1973 *On Old Age Pension Income of Artists and their Families*, Journal of Laws of 1973, No. 38, item 225.

[1478] The Act of 19 December 1975 *On Social Security of Persons Providing Contracted Services*, Journal of Laws of 1975, No. 45, item 232.

[1479] The Decree of 4 March 1976 *On Social Security of Members of the Farmer's Production Cooperatives, Contracting Cooperatives, and their Families*, Journal of Laws of 1976, No. 10, item 54.

members of the farmer's production cooperatives, contracting cooperatives, and their families. This was also the year when the regulations for craftsmen were changed yet again[1480]. In 1977[1481] the fund for social security for craftsmen and, the fund for social security of certain social groups ceased to exist, and the capital that had been in their possession was split between the pension fund – 70%, and the state budget – 30%. In the same year, farmers and their families were covered by social security[1482]. A separate agricultural pension fund was created in order to accumulate capital for farmers' pensions, which fell under the authority of the ZUS. In 1981 the contributions for the retirement payments were equal to 25% of the remunerations fund[1483]. The Act of 1982[1484] replaced the farmers' pension fund with a new one named the \`farmers' social security fund´. In 1983[1485] the pension regulations for the railway staff were changed. In 1984 the accident insurance was introduced[1486]. The Act of 1986[1487] set up the Social Security Fund (*Fundusz Ubezpieczeń Społecznych*, FUS). The same act stopped the operation of the pension fund of 1968. This act demanded that employers pay from their own means for the social insurance of their employees. In 1986 the indexation of pensions was introduced[1488]. In the period from 1987 to 1989[1489] the social insurance contributions amounted to 38% of remunerations. In 1989[1490] also the clergy

[1480] The Act of 18 December 1976 *On Social Insurance of People Conducting Business Activity on their Own Account and their Families*, Journal of Laws of 1976, No. 40, item 235.

[1481] The Order of the Council of Ministers of 10 February 1977 *On Financing Social Security for Craftsmen and Certain Other Social Groups*, Journal of Laws of 1977, No. 5, item 21.

[1482] The Act of 27 October 1977 *On Old Age Pension Income and Other Benefits for Farmers and their Families*, Journal of Laws of 1977, No. 32, item 140.

[1483] Poteraj J. (2005), p. 209.

[1484] The Act of 14 December 1982 *On Social Insurance for Private Farmers and their Families*, Journal of Laws of 1982, No. 40, item 268.

[1485] The Act of 28 April 1983 *On Old Age Pension Income of the Employees of the Railway and their Families*, Journal of Laws of 1983, No. 23, item 99.

[1486] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 249.

[1487] The Act of 25 November 1986 *On Organization and Financing of Social Insurance*, Journal of Laws of 1986, No. 42, item 202.

[1488] Golinowska St., Piętka K., Sowada Ch., Żukowski M. (2003), p. 41.

[1489] Hausner J. (2002), p. 349.

[1490] The Act of 17 May 1989 *On Social Insurance of the Clergy*, Journal of Laws of 1989, No. 29, item 156.

were included in the social security system. A number of important events followed in the next years[1491]:

- the sharp rise – especially in 1991[1492] – in the number of persons collecting old-age or disability pension payments (an event with long-term consequences),
- the fall in the number of the contribution payers, due to the fall in employment[1493],
- the significant growth in the real value of pensions in relation to remunerations.

A new act was passed in 1990 that changed the rules of the social insurance of farmers[1494]. It decided that in 1991 the Farmers' Social Insurance Fund (*Kasa Rolniczego Ubezpieczenia Społecznego*, KRUS) should be created and take over from the ZUS the management of the pension system for farmers[1495]. In 1993[1496] the regulations for professional army personnel were changed, and in 1994[1497] for the police and other uniformed services. Despite the growth in the social insurance contribution levels, in 1994 the revenues from the contribution collections amounted to 74.9% of FUS income; 23.9% coming from the state budget and 1.2% from other sources[1498]. In this situation, on 1 October 1996, the Government Plenipotentiary Office for Social Security was set up[1499]. The

[1491] Poteraj J. (2005), p. 209.

[1492] In 1991 the retirement payment was granted to about 500,000 people, whereas the yearly average in years 1985-1989 and 1993-1996 was 150,000.

[1493] This figure decreased from above 14 million in 1989 to slightly above 12 million in 1996.

[1494] The Act of 20 December 1990 *On Social Insurance of Farmers*, Journal of Laws of 1991, No. 7, item 24.

[1495] *POLAND. National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 7.

[1496] The Act of 10 December 1993 *on Old Age Pension Income for Professional Soldiers and their Families*, Journal of Laws of 1994, No. 10, item 36.

[1497] The Act of 18 February 1994 *On Old Age Pension Income for the Employees of the Police, Internal Security Office, Border Guards, National Fire Brigade, Prison Guards, and their Families*, Journal of Laws of 1994, No. 53, item 214.

[1498] Wantoch-Rekowski J. (2005), p. 47.

[1499] The Government's Plenipotentiary for Social Security was first Andrzej Bączkowski; after his death, the execution of this office was entrusted to Maciej Manicki.

Office started off with a document[1500] comprising a project of a multi-pillar system of social security for old-age pensions. The new system was to consist of the following elements:

- general public repartition segment[1501] (the reformed FUS),
- public pension funds,
- voluntary additional insurance.

Before the change, the replacement rate, which puts the value of the retirement benefit against the net remuneration, was around 70%[1502]. In 1997 the implementation of the *Security Through Diversification* programme started, which meant the introduction of the three pillars of pension security[1503]. The new system did not include farmers, uniformed services, judges and public prosecutors. Only in 1997 new Acts were passed that tackled the matters of pension income: 1) on the allocation of a part of the state budget's income to tasks connected to the reform of the social security system[1504], 2) on company pension plans[1505,] and 3) on the organization and activities of pension funds[1506]. The last two documents made provision for the operation of the 3rd and 2nd pillar, respectively, of the pension security system in Poland. In 1998 two new regulations appeared that referred to the 1st pillar: 1) on the social security system[1507,] and 2) on old-age and disability pensions paid by the FUS[1508]. At the end of 1998, the social

[1500] *Bezpieczeństwo dzięki różnorodności. Reforma systemu emerytalno-rentowego w Polsce* (1997).

[1501] In the Office's paper, it was determined with the application of the International Capital Pension Entitlement. Cf.: *Bezpieczeństwo dzięki różnorodności. Reforma systemu emerytalno-rentowego w Polsce* (1997), pp. 50 and further.

[1502] Holzmann R., MacKellar L., Rutkowski M., (2003), p. 38.

[1503] Hausner J. (2002), p. 349.

[1504] http://isip.sejm.gov.pl/servlet/Search?todo=file&id=WDU19971060673&type=2&name=D19970673.pdf, accessed 28 December 2007.

[1505] http://isip.sejm.gov.pl/servlet/Search?todo=file&id=WDU19971390932&type=2&name=ATT4UXWJ, accessed 28 December 2007.

[1506] http://isip.sejm.gov.pl/servlet/Search?todo=file&id=WDU19971390934&type=2&name=D19970934.pdf, accessed 28 December 2007.

[1507] http://isip.sejm.gov.pl/servlet/Search?todo=file&id=WDU19981370887&type=2&name=D19980887.pdf, accessed 28 December 2007.

[1508] http://isip.sejm.gov.pl/servlet/Search?todo=file&id=WDU19981621118&type=2&name=D19981118.pdf, accessed 28 December 2007.

security contributions reached the level of 45%[1509] of remunerations[1510]. The reform finally began at the beginning of 1999, although the regulations shaping the 2nd pillar started to function only three months later. The new solution comprised three pillars: 1) mandatory 1st pillar being the reformed form of the FUS, working along the pay-as-you-go formula, but at the same time applying the NDC (notional defined contribution) policy[1511] in the form of individual records of contributions, 2) compulsory 2nd pillar, which is a financial structure made of open pension funds (*Otwarte Fundusze Emerytalne*, OFE) managed by public pension companies (*Powszechne Towarzystwa Emerytalne*, PTE), and 3) voluntary 3rd pillar consisting of employee pension schemes investing in capital markets. The retirement age remained 65 years for men and 60 for women. The compulsory pension contribution was 19.52% of the gross remuneration and was paid in equal parts by the employer and the employee. The contributions were paid on that part of the income that did not exceed the average monthly wage predicted for the calendar year multiplied by 30. The contribution was then split: 12.22% was allocated to the 1st pillar, and 7.3% to the 2nd pillar. The participation in the 2nd pillar was obligatory for those up to 30 years of age (born in 1969 and later) and voluntary for those aged 31 to 50[1512] (born after 31 December 1948 but not later than 31 December 1968). Those born before 1949 were not given the option of participating in the 2nd pillar[1513]. The employee pension schemes (*Pracownicze Programy Emerytalne*, PPE – 3rd pillar) could take one of the following four forms: 1) an employee pension fund (*Pracownicze Fundusze Emerytalne*, PFE), managed by an employee pension society (*Pracownicze Towarzystwa Emerytalne*, PrTE), 2) a contract binding the employer to pay the employees' contributions into an investment fund, 3) a contract with an insurance company for a collective

[1509] Such level the contribution achieved in 1992. Cf.: http://isip.sejm.gov.pl/servlet/Search?todo=file&id=WDU19920180076&type=2&name=D19920076.pdf, accessed 13 August 2008.
[1510] Wantoch-Rekowski J. (2005), p. 63.
[1511] Holzmann R. and Hinz R. et al. (2005), p. 153.
[1512] Fultz E. (2004), p. 63.
[1513] Pater K. (2004), p. 151.

life insurance for employees, and 4) a contract binding the employer to pay the contributions of those employees who are members of a mutual insurance society to this society. The PPEs could be created in enterprises which have a company pension scheme. Such a company pension scheme was signed by the employer and employee representatives. The reception of income from the 3rd pillar was possible on reaching the age of 60. The creation of the OFE by a public pension company was possible once it had obtained the permit from a newly created institution – the Pension Funds Supervisory Office (*Urząd Nadzoru nad Funduszami Emerytalnymi*, UNFE). A public pension company was required to have the stock capital equivalent to at least €4.0 million. Another condition was that a company (or a group of connected companies) was allowed to be a stockholder in only one public pension company. Moreover, the PTE could set up only one OFE. In 1998 and 1999, altogether 21 PTEs were created and in 1999 these created 21 OFEs[1514]. People up to 30 years of age were obliged to subscribe to the OFE of their choice by the end of September 1999, and all persons aged between 31 and 50 could subscribe to a selected OFE by 31 December 1999. Those participating in the OFE were sent yearly statements about their account in their OFE[1515]. The 2nd pillar was joined obligatorily by 3.8 million people aged up to 30 years; the solutions offered by this pillar also attracted 6.7 million voluntary members aged 31-50, which made a total of 10.5 million[1516]. The following funds won the largest numbers of participants: Commercial Union OFE BPH CU WBK, OFE Nationale-Nederlanden Polska, and OFE PZU Złota Jesień; all of them were governed by the PTEs, whose shareholders were recruited from the insurance sector. Around 400,000 people were involved in the acquisition of pension funds at that time[1517]. In 2001 the average retirement pension paid by the ZUS was equal to 62% of the average pay, but about 60% of

[1514] After the consolidation, at the end of 2007 there were 15 OFEs remaining on the market.
[1515] *POLAND. National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 30.
[1516] Hausner J. (2002), p. 355.
[1517] Fultz E. (2004), p. 63.

those retired received pensions that were lower than the average[1518]. In 2001 the legal act providing pension regulations for judges was changed[1519]. In 2002 the Demographic Reserve Fund (*Fundusz Rezerwy Demograficznej*, FRD) was opened[1520]; it collects a part of the resources of the pension money collected by the ZUS. The role of the fund is to co-finance increased pension payments, which will start in 2009. The resources of the FRD are expected to reach PLN4.5 billion by the end of 2008[1521]. On 1 April 2002, the supervision of the pension market in the area of 2nd and 3rd pillar was granted to the Insurance and Pension Funds Supervisory Commission (*Komisja Nadzoru Ubezpieczeń i Funduszy Emerytalnych,* KNUiFE), which replaced the UNFE[1522]. In 2002 the minimum pension was PLN530 per month[1523]. In 2003 all persons insured in the ZUS started to receive information on the amount of money paid in the previous year[1524]. In 2004 another regulation was made[1525] to set rules for the Individual Pension Accounts (*Indywidualne Konta Emerytalne*, IKE) – another element of the 3rd pillar of pension insurance; also, the law on employee pension schemes was changed[1526]. According to the latter regulation, the employee pension schemes could take one of the following forms: 1) a pension fund, 2) an agreement with the employer that he will pay the employees' contributions to an investment fund, and 3) a collective employees' life insurance contract in the form of collective life insurance as an insurance capital fund made with an insurance company. In 2004 supplementary subsidy for the pension

[1518] Golinowska St., Piętka K., Sowada Ch., Żukowski M. (2003), p. 43.

[1519] The Act of 27 July 2001 *Law of Common Courts*, Journal of Laws of 2001, No. 98, item 1070.

[1520] *POLAND. National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 20.

[1521] *Fundusz Rezerwy Demograficznej* (2006).

[1522] The Act of 1 March 2002 *On Changes in Organization and Operation of the Central government Administration Bodies and their subordinate Entities and on Changes of Selected Acts of Laws*, Journal of Laws of 2002, No. 25, item 253.

[1523] Whitehouse E. (2007), p. 148.

[1524] *POLAND. National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 30.

[1525] The Act of 20 April 2004 *On Individual Pension Accounts,* Journal of Laws of 2004, No. 116, item 1205.

[1526] The Act of 20 April 2004 *On Employee Pension Schemes*, Journal of Laws of 2004, No. 116, item 1207.

system amounted to PLN19.4 billion. Additionally, PLN3.5 billion was transferred in the form of purpose subsidy to finance benefits paid from the state budget and PLN10.6 billion as refund to cover contribution loss due to transfer to open pension funds[1527]. The replacement rate, measured as the ratio of the average pension to the average pay was 64%[1528]. In the same year the incomes of the old age and disability pension fund for farmers were as follows: PLN1.1 billion came from farmers' contributions, and PLN15.1 billion from the government subsidy[1529]. In 2005 the spectrum of possible forms of employee pension plans was supplemented with a fourth option: 4) foreign management. In the middle of 2005 the minimum pension was PLN562.58 per month[1530]. In July 2005 the laws on pensions of teachers and miners were amended[1531]. On 19 September 2006, the supervision of pensions in the 2nd and 3rd pillars was taken over by the Finance Supervisory Commission (*Komisja Nadzoru Finansowego*, KNF)[1532] from the KNUiFE. At the end of November 2007, the assets of the open pension funds reached PLN138.5 billion[1533].

### 2.20.3 The present state of the pension system in Poland

Currently the pension system in Poland contains four basic elements: A) the general pension system, B) the system for farmers, C) the system for uniformed services and D) the systems for judges and for public prosecutors. Regardless of the system they are in, the poorest people of pensionable age may receive a monthly benefit of up to PLN461, which

[1527] *POLAND. National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 5.

[1528] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 94.

[1529] *POLAND. National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 7.

[1530] *POLAND. National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 10.

[1531] The Act of 27 July 2005 *Amending the Act on Old Age and Disability Pensions paid from the Social Security Fund and the Act Teachers' Card*, Journal of Laws of 2005, No. 167, item 1397.

[1532] The Act of 21 July 2006 *On the Supervision over the Finance Market*, Journal of Laws of 2006, No. 157, item 1119.

[1533] http://www.analizy.pl/analizy_online/index.php?strona=show_raport&id=5242&c=2792608&jezyk=pl, accessed 31 December 2007.

is a part of the social aid and not the pension system. The present state of the pension system in Poland is presented in **Scheme no. 20**.

**Scheme no. 20**

**The present state of the pension system in Poland**

| **element A** | | | | | **element B** | **element C** | **element D** |
|---|---|---|---|---|---|---|---|
| the general pension system | | | | | | | |
| 1st pillar | | 2nd pillar | 3rd pillar | | | | |
| the 'old' solution embraces all those born until the end of 1948 -the pay-as-you-go formula | the 'new' solution obligatory for those born after 31 December 1948 – the notional defined contribution (NDC) | obligatory for those born in 1969 and later and voluntary for those born after 31 December 1948 but not later than 31 December 1968 open pension funds *Otwarte Fundusze Emerytalne*, OFE managed by public pension companies *Powszechne Towarzystwa Emerytalne*, PTE | the employee pension schemes Pracownicze Programy Emerytalne, PPE | the Individual Pension Accounts Indywidualne Konta Emerytalne, IKE | the system for farmers | the system for uniformed services | the systems for judges and for public prosecutors |
| administered by the Social Security Institution *Zakład Ubezpieczeń Społecznych*, ZUS | | supervised by the Finance Supervisory Commission *Komisja Nadzoru Finansowego*, KNF | supervised by the Finance Supervisory Commission *Komisja Nadzoru Finansowego*, KNF | | managed by the Farmers' Social Insurance Fund *Kasa Rolniczego Ubezpieczenia Społecznego*, KRUS | managed by the appropriate ministries: the Ministry for National Security, the Ministry for Internal Affairs and Administration, the Ministry of Justice | managed by the Ministry of Justice |

Source: Own elaboration.

**A. The general pension system** comprises two methods of pension payments: 1) the 'old' solution, and 2) the 'new' solution.

In **the 'old' solution** there is no second pillar and the base pension is paid by the ZUS. It embraces all those born until the end of 1948. The pension contribution is 19.52% of the gross remuneration, and the retirement age is 65 years for men and 60 for women. Early retirement is possible, in the case of women even at 55, on the condition of having been at least 30 years in the system. In order to obtain their pension payments in full, one has to have been insured for at least 20 years for women or 25 years for men[1534]. It is also possible for teachers[1535], employees of the railway, and academic lecturers, to speed up the retirement by 5 years; miners can start their retirement even at the age of 50, on the condition that the early retiring woman or man has been employed for at least 20 or 25 years, respectively, or for 15 years, in the case of miners. The pensions are calculated with the following formula:

$$P = 0{,}24 \bullet S + 0{,}013 \bullet N' \bullet B + 0{,}007 \bullet N'' \bullet B,$$

where:
P – pension,
S – base amount[1536],
B – individual reference base[1537],
N' – number of insurance years with contributions,
N" – number of insurance years without contributions.

Note: the non-contribution years cannot exceed 1/3 of contribution years[1538].

[1534] Golinowska St., Piętka K., Sowada Ch., Żukowski M. (2003), p. 29.
[1535] Only until the end of 2008.
[1536] Base amount comes to 100% of average remuneration depreciated of contributions on social security deducted from the insured, defined in the social security system regulations, in the previous calendar year.
[1537] The base of pension assessment constitutes an average base of assessment of contribution on pension security from the 10 successive calendar years, chosen by the pension system member from last 20 calendar years which directly preceded the year when the pension application was notified.
[1538] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 246.

The management of the system is performed by the ZUS. There is a minimum payment determined in the system, which is PLN**597.46 per month**[1539]**.** Old age and disability pensions are periodically indexed, from 1 March every year, according to the index of consumption goods and services with taking into consideration of the index of average wages increase. The old age pensions are indexed by an index which is determined annually in the national budget. Pensioners do not pay social security contributions, but they do pay their healthcare contribution equalling 9.00% of their income. There are no special tax advantages as far as pension payments are concerned[1540]; they are taxed under general regulations[1541].

In **the 'new' solution** there are three pillars: 1) mandatory 1st pillar, which is the reformed FUS, 2) mandatory 2nd pillar – pension funds, and 3) voluntary 3rd pillar, comprising the PPEs and the IKEs.

Within **the 1st pillar**, contributions are transferred to the FUS pension fund. After that, they are recorded on individual accounts, but are actually used to pay retirement income to current beneficiaries. The contributions paid before 1999 were recorded on individual accounts as the initial capital. In 2008, 0.35% of the retirement pension contribution is transferred to the FRD. There are two groups of participants in the new solution: 1) all born in 1969 and later and those who, having been born in the period from 1949 to 1968, did choose to participate in the 2nd pillar, and 2) those who, having been born in the period from 1949 to 1968, did not choose to participate in the 2nd pillar. In the case of the first group the contribution itself amounts to 12.22% of the gross remuneration[1542], out of which 9.76% is paid by the employing company and 2.46% by the employee. In the case of second group all contribution – 19.52% remains in the 1st pillar, out of which 9.76% is paid by the employing company

1539 http://www.zus.pl/default.asp?p=1&id=52, accessed 31 December 2007.

1540 Whitehouse E. (2007), p. 149.

1541 On 1 January 2008, the income tax was calculated as 19% on annual remuneration up to PLN44,490, then on amounts in excess of it up to PLN85.528 – 30%, and 40% of the amounts exceeding the second limit.

1542 Whitehouse E. (2007), p. 148.

and 9.76% by the employee. The employee's contribution is calculated against the base, which has the minimum payment as its one limit, and 250% of the average pay as the other. In the case of the self-employed, the law stipulates the minimum base amount for calculation of the pension contribution, which is equal to 60% of the average pay. The retirement age is 65 years for men and 60 for women. There is no possibility of early retirement. There are no requirements on the minimum time of the participation of the system. Retirement income is calculated with the following formula:

$$P = K/G,$$

where:
P – annual payment to the retired person,
K – indexed capital on the individual account of the retired person at the time of retirement,
G – life expectancy at retirement.

The system is managed by the ZUS. The accumulated contributions and pensions are revised by an index which is annually set in the Budgetary Act.

In **the 2nd pillar**, contributions are collected by the ZUS and transferred to open pension funds. The contribution is 7.30% of the gross wage[1543] and is paid by the employee. OFEs invest the collected capital on the financial markets. PTEs charge certain amounts for the management of their OFEs. There are currently 15 OFEs on the market, which are managed by 15 PTEs. The legal regulation for payments from this pillar still has to be made. The first payments from this pillar will take place in 2009 (to women born in 1949)[1544].

In **the 3rd pillar** there are two solutions: 1) employee pension schemes (PPEs), and 2) individual pension accounts (IKEs).

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[1543] Whitehouse E. (2007), p.148.

[1544] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 96.

**Employee pension schemes** (PPEs) may take one of the four forms: 1) employee pension fund (PFE), 2) a contract binding the employer to pay employee's contributions to an investment fund, 3) a collective employees' life insurance contract in the form of collective life insurance as an insurance capital fund made with an insurance company, 4) foreign management. An employee scheme is created by a company agreement made by the employer and employee representatives. Such a contract should stipulate the compulsory payment contributions by the employer and voluntary payment of the declared contribution by the employee. The contributions are paid by the employer to the level of 7% of the gross remuneration, they are tax-deductible costs for the employer and reduce the base for the calculation of the social insurance contribution.

**Individual pension accounts** (IKEs) are a form of voluntary saving for one's pension. One person may have only one IKE. Payments into the IKE may be made by a person who is at least 16 years of age. The IKE may be opened by making a contract with one of the four types of institutions: 1) an investment fund, 2) an entity conducting security brokerage activity offering a stock account with a correlated money account, 3) an insurance institution offering life insurance policies with an insurance capital fund, or 4) a bank offering a money account. It is possible to transfer capital from one IKE to another, as well as from the IKE to the PPE and the other way round. The saver of the IKE is entitled to tax exemption on income tax when he or she accumulates savings in only one IKE. That exemption concerns only payments not exciding 1.5 predicted average monthly salary in national economy for the present year, which in 2008 means the amount of PLN4,055.12.

Apart from the general pension system, there are separate pension systems for farmers, uniformed services[1545], judges and public prosecutors[1546].

[1545] Golinowska St., Piętka K., Sowada Ch., Żukowski M. (2003), p. 29.
[1546] Wantoch-Rekowski J. (2005), p. 114.

**B.** As opposed to the systems that will be discussed later, **the system for farmers** does include paying contributions. They are paid quarterly and equal to 30% of the minimal employee pension. The benefit is calculated with the following formula:

$$P = B \bullet (0.01 \bullet N+0.95),$$

where:
P – the paid benefit,
B – the base, equal to the minimal pension for employees,
N –number insurance years.

If the number of insurance years (N) is larger than 20, the pension formula takes the following form:

$$P = 0.01 \bullet N \bullet B + B \bullet (0.95 - 0.005 \bullet d),$$

where:
d = N-20.

The retirement age is 65 for men and 60 for women. The required participation period is at least 100 quarters of the year[1547]. It is possible to retire 5 years ahead of the regular retirement age, at a small loss of benefit. For its functioning, the system needs budgetary subsidy amounting to 90% of its capital needs[1548].

The system is managed by the KRUS.

**C. The system for uniformed services** embraces professional soldiers, employees of the police, fire fighters from the National Fire Brigade, employees of the Government Security Office, prison guards, the Agency of Internal Security, the Military Counter-Intelligence, the Military Intelligence, the Customs Officers, and the Central Anti-Corruption Office. The system does not provide for paying contributions, and the benefits are paid directly from the budgets of the appropriate ministries.

[1547] *POLAND. National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 7.
[1548] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 95.

Within this system the special notions of 'army pension' and 'police pension' exist, whereby the army pension is applicable only to professional military personnel, and the police pension includes policemen and policewomen as well as other uniformed services. To obtain any of the above types of pension, 15 years in service is required, with no limit on the retiring age. In this system, it is possible to retire at 33, if one started one's service at the age of 18. The maximum pension is equal to 75% of the last remuneration. The discussed types of pensions are currently paid to over 329,000 beneficiaries[1549]. The system is managed by the appropriate ministries: the Ministry for National Security, the Ministry for Internal Affairs and Administration, the Ministry of Justice.

**D. The systems for judges and for public prosecutors**

**The system for judges** makes it possible for the judge to retire at 65 years of age or earlier due to illness or loss of energy. It is also possible for a female judge to retire at 55 and for a male judge at 60, if one has worked at this post for at least 25 or 30 years respectively. Judges can remain in employment until their 70$^{th}$ year of life, which is possible unless the council of judges of their court disagrees. As in the system for the uniformed services, there are also no contributions in this one. The retirement income of a judge is 75% of the last basic salary combined with the extras for the number of years in employment. The pensions are paid by the Ministry of Justice, which also administers the system.

**The system for public prosecutors** functions along the same lines as the system for judges. It is also managed by the Ministry of Justice.

### 2.20.4 Challenges and planned changes in the pension system in Poland

The most important challenge that Poland has to face is the aging population. It is expected that in 2050 the ratio of the number of persons

[1549] *POLAND. National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 8.

aged 18-59/64 to the number of persons aged 60+/65+ will reach 1.5[1550]. Other important influences are the economic situation and being a part of the European Union. As far as the ZUS is concerned, its possible future insolvency is sometimes suggested if the budgetary subsidy does not increase substantially from the year 2009 onwards. Resources accumulated in the FRD are not sufficient to co-finance increased pension payments. Also, not all the problems with the transfer of capital from the ZUS to the OFE have been solved. Moreover, to date there is no legal regulation for the old age pension payments from the 2nd pillar, even though the first ones will take place in 2009[1551]. The pension system for farmers, which is managed by the KRUS, is another problem. In the study prepared by the Polish Government in 2005[1552], the challenges that the Polish pension system will have to handle can be divided into the following areas: 1) current operations and 2) future actions. The first group encompasses the legal regulations of the bridge pensions, capital pensions, and the social insurance of farmers. The second group consists of activities mostly aimed at enhancing the flexibility of the retirement age of men and women and their equalization, as well as the task to set up the office of the national actuary. The transition costs are the next challenge of pension reform undertaken in Poland. The deficit in 1st pillar, which arises on account of the lack of sufficient wherewithal to the pay-as-you-go system, is covered by the budget donation. The widely understood financial consequences mean the effects of the reforms as regards costs, receipts, profits, expenditure, financial results and the volume of future payments.

### 2.20.5 Summary

The old age pension system in Poland is the product of earlier conceptions of old age income security, which date back to the time of Bismarck, and the major reform of 1999, which brought the three-

[1550] Chłoń-Domińczak A., Góra M. (2006), p. 438.
[1551] Chłoń-Domińczak A., Góra M. (2006), p. 425.
[1552] *POLAND. National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 32.

pillar solution with significant participation on the capital market. This is the right place to point to the obvious systemic incongruities, like the continuation of the separate solutions for farmers, uniformed services, judges and public prosecutors. These remnants of the old system are a heavy burden on public finances, and if not changed, they are very likely to continue to do so over the next 40 years.

Looking at Poland from an international perspective, it is interesting to notice that the national social security institution is obliged to inform insured citizens about the balance on their retirement accounts in the first pillar.

## 2.21 PORTUGAL

### 2.21.1 General information about the country

The Republic of Portugal[1553] (*República Portuguesa*) is a country located in south-western Europe, on the coast of the Atlantic Ocean, in the south-west of the Iberian Peninsula as well as on the islands of the Azores and Madeira in the Atlantic Ocean. It consists of 18 districts (*distritos*) and two autonomous regions (*regiões autónomas*), namely the Azores and Madeira.

The official language is Portuguese. The largest ethnic group were the Portuguese (98% of the population). The descendants of the former Portugal colonies in Africa constitute less than 1% of the population. The largest religious group were the Catholics (84.5% of the population). Approximately 13% of the population were atheists and people of unknown religions. According to the Constitution of the country adopted in 1976, the head of state is the President, and the government is led by the Prime Minister.

In 1949 Portugal became a NATO member and in 1986 became a member of the European Economic Community. In 1999 Portugal

[1553] *Wielka Encyklopedia PWN* (2004), v. 22, pp. 98 and further.

joined the European Economic and Monetary Union, thus replacing the Portuguese escudo with the euro[1554].

The current currency in Portugal is the euro.

The GDP *per capita* (PPP) was estimated in 2007 at US$21,800, with a growth rate of 1.7%, and the public debt amounted to 65.8% of the GDP. The current national balance at the end of 2007 showed the deficit of US$12.61 billion.

The unemployment rate was 8.0%.

In July 2007 the population of Portugal was 10,642,836[1555], with the following age groups: 0-14 years of age – 16.5%, 15-64 years of age – 66.3%, 65 years of age and older – 17.3%. The average life expectancy at birth was 77.87 years: 74.60 years for men and 81.36 years for women.

### 2.21.2 Historic development of the pension system in Portugal

As long ago as in the 19th c., the word *previdência*[1556] appeared in the Portuguese nomenclature. Literally, the word means farsightedness and refers to thinking about the provision of resources for the old age[1557]. During the republican times, the first regulation concerning accident insurance was introduced in 1913[1558]. The Ministry for Labour and Welfare was established in 1916 but the regulations created in 1919 concerning the pension area have never been introduced[1559]. As early as during the reign of Salazar, *Caixa Geral de Aposentações* (CGA) was established in 1929, and *Montepio dos Servidores do Estado* (MSE) in

[1554] The Portuguese escudos (PTE) were converted into the euro (EUR) at the exchange rate of PTE200.482 to EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 21 February 2008.

[1555] https://www.cia.gov/library/publications/the-world-factbook/geos/po.html, accessed 31March 2008.

[1556] The word has survived until the present times in the name of the Ministry of Welfare Affairs in the Portuguese-speaking Brasil (*Ministério da Previdęncia Social*).

[1557] Chuliá E., Asensio M. (2007), p. 624.

[1558] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 257.

[1559] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 253.

1934, both involved in old-age security of state officials[1560]. In **1935** a compulsory social security system (*previdência social*) was created for workers in the industrial, trade and service sectors[1561]. The system, initially covering in real terms only 6% of those obliged to participate, was an element of Salazar's New State (*Estado Novo*) financed by contributions from employers and employees, and managed by corporate organisations[1562]. The system included health insurance[1563] but failed to provide security for the risks of maternity, widowhood, orphan-hood, lack of employment, accidents at work and occupational diseases. At a later stage, the National Provident Fund (*Caixa Nacional de Previdência*, CNP) was established for the servicing of old-age pensions. The financial settlements of that Fund were performed by a public fund called *Caixa Geral de Depósitos, Crédito e Previdência* (CGD). The CGA became part of that fund[1564]. In 1942 the first regulation concerning family benefits was passed[1565]. In the 1940s a system of social assistance (*assistęncia social*) was introduced with a view to improving the moral, economic and health conditions of the poor. In 1950 social security contributions were paid by approximately 50% of the employees obliged to do so[1566]. In 1962 a common public system based on the corporate concept of *previdęncia* was introduced thus covering social assistance and the risks of old age and loss of health[1567]. The system was based on the pay-as-you-go formula. In order to obtain the old-age pension, ten years of participation in the system was required, including at least 60 months of contribution payment. In 1965, the CNP was transformed into the National Pension Fund (*Caixa Nacional de Pensões*, also abbreviated to CNP), which started servicing the gathering and paying out of the funds earmarked for old-

[1560] http://www.cga.pt/apresentacao_EN.asp?L=EN, accessed 4 January 2008.
[1561] Stańko D. (2004), p. 269.
[1562] Chuliá E., Asensio M. (2007), pp. 624 and 625.
[1563] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 255.
[1564] http://www.cga.pt/apresentacao_EN.asp?L=EN, accessed 4 January 2008.
[1565] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 259.
[1566] Stańko D. (2004), p. 269.
[1567] Chuliá E., Asensio M. (2007), p. 625.

age pensions. In 1971 the first regulation permitting individual accumulation of capital for old-age pensions was passed[1568]. The legal concept of social security (*segurança social*) appeared in the Portuguese reality as late as in 1973[1569]. It was then that the required period of participation in the old-age insurance system was reduced from ten to three years, the minimum contribution period from 60 to 24 months, and the retirement age of women from 65 to 62 years[1570]. The social security contribution was 23.5% of the salary. After the 1974 revolution a social old-age pension and the thirteenth old-age pension payable at Christmas were introduced[1571]. 1975 saw the passing of the first regulation concerning unemployment insurance[1572]. In 1977 the social security contribution was increasd by 3.0% to 26.5% of the salary, that percentage being split into 19% payable by the employer and 7.5% by the employee. In 1977-79 civil servants and the self-employed were covered by compulsory social insurance[1573]. At the beginning of 1980, the participation period in the old-age insurance system required for an old-age pension was extended from three to five years. In the same year, a non-contribution system for the poorest was introduced[1574]. 1981 saw another increase in the social security contribution, this time to 28.5% of the salary, including 20.5% payable by the employer and 8.0% by the employee. The 1984 law deemed the following to be the elements of the social security system: 1) old-age regimes: the contribution and non-contribution ones, and 2) the welfare action programme preventing social exclusion. In 1985 the first regulation came into being then permitting the functioning of additional retirement schemes financed by the employers and supervised by the Portuguese Institute of Insurances (*Instituto de Seguros de Portugal*,

[1568] Pavão Nunes J. (2007).
[1569] Chuliá E., Asensio M. (2007), p. 624.
[1570] Chuliá E., Asensio M. (2007), p. 625.
[1571] Stańko D. (2004), p. 269.
[1572] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 258.
[1573] Chuliá E., Asensio M. (2007), p. 626.
[1574] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 253.

ISP)[1575]. In 1986 the special social security regime for farmers (*Regime Especial de Segurança Social das Actividades Agrícolas*, RESSAA) stopped accepting new members and changed its name to the Transitory Rural Regime (*Regime Rural Transitorio*, RRT)[1576]. On 1 October 1987, the period of participation in the old-age insurance system required for an old-age pension was extended from five to ten years. 1989 saw the introduction of the first individual pension schemes (*Planos de Poupança Reforma*, PPR) as a form of the operation of the third insurance pillar[1577], and the creation of the Fund for Financial Stabilisation of Social Security (*Fundo de Estabilização Financeira da Segurança Social*, FEFSS)[1578]. The money in the Fund is earmarked for the stabilisation of the pension system and for use in 2020-2030. In 1990 the fourteenth old-age pension payable in July was introduced[1579]. In that year, there were 30 professional pension funds on the market[1580]. The 1993 reform changed the rules concerning the formula for the calculation of the old-age pension thus taking into account the best ten out of the last 15 years before retirement instead of five out of the best ten[1581]. The period of participation in the system required for an old-age pension was extended from 10 to 15 years[1582] and the period of participation necessary for a full old-age pension was extended from 37 to 40 years. Moreover, the process of increasing the retirement age for women from 62 to 65 years was initiated, and the base for the calculation of the reference salary was changed from nominal to real salary[1583]. In the same year, the CGA stood apart from the CGD structures, and the MSE was abandoned[1584]. Depending on the

[1575] Pavão Nunes J. (2007).
[1576] Chuliá E., Asensio M. (2007), p. 656.
[1577] Pavão Nunes J. (2007).
[1578] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 102.
[1579] Pereira A. M., Rodrigues P. G. (2001).
[1580] *Portugal shifts from state dependency* (2006).
[1581] Stańko D. (2004), p. 269.
[1582] Chuliá E., Asensio M. (2007), p. 628.
[1583] Stańko D. (2004), p. 269.
[1584] http://www.cga.pt/apresentacao_EN.asp?L=EN, accessed 4 January 2008.

kind of business, contributions for the self-employed were 8%, 12% or 15% of their income[1585]. The decree of 25 September 1993 introduced changes in the pension system for the self-employed thus making the value of contributions towards the old-age pension dependent on real costs of the benefits[1586]. In addition, a rule taking into consideration 14 annual salaries instead of 12 in the calculation of an average salary was introduced[1587]. Under the law passed in 1994 the social security contribution covered by the employer was reduced from 24.5% to 23.75% and the VAT rate increased from 16% to 17% as from the beginning of 1995. The extra 1 percentage point of the VAT was referred to as the social VAT (*social VAT*)[1588]. That part of the VAT is used for financing benefits in the non-contribution scheme[1589]. In 1995 another regulation was passed thus enabling the functioning of individual pension schemes forming an element of the third pillar in the old-age pension and children's education formula (*Planos de Poupança Reforma/Educacao*, PPR/E)[1590]. 1997 saw a change in the functioning of accident insurance[1591] and family benefits[1592]. In January 1998 *The White Social Security Book* (*Livro Branco da Segurança Social*)[1593] was published, which forecast a considerable deficit of old-age insurances in 2010-2015. The principles of the functioning of health insurance[1594] were revised in 1998 too. In 1999 a principle was introduced concerning the reduction of an old-age pension by 4.5% for each year of early retirement before the age of 65 and the increase in such a pension by 10% for each year of late retirement after the age of 65[1595]. At the same time, the retirement age was made flexible in the 55-70 year

1585 Stańko D. (2004), p. 270.
1586 Stańko D. (2004), p. 270.
1587 Chuliá E., Asensio M. (2007), p. 635.
1588 Stańko D. (2004), p. 269.
1589 Chuliá E., Asensio M. (2007), p. 630.
1590 Decreto-Lei n.ş 204/95, de 5 de Agosto.
1591 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 257.
1592 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 259.
1593 Chuliá E., Asensio M. (2007), p. 636.
1594 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 255.
1595 Stańko D. (2004), p. 270.

bracket provided that the period of participation in the system was at least 30 years[1596]. In the case of those unemployed on a long term basis, the contribution period of 20 years was sufficient for retirement at the age of 55. It was also in 1999 that the unemployment insurance law was updated[1597]. 2000 saw the introduction of the principle of indexation with the inflation index of old-age pensions and of the base amount for their calculation. The principle for the calculation of the old-age pension on the basis of earnings in the entire employment period, not longer, however, than 40 years, was introduced too. The retirement age for men and women was eventually set at 65 years[1598]. In 2000 the minimum pension was paid to more than 44% of base system old-age pensioners[1599], and the average annual income of an old-age pensioner was €3,144[1600]. In 2001, the average insurance contribution in the basic system was €638 per month and the average old-age pension €726[1601]. Towards the end of 2001, the funds accumulated in the FEFSS totalled approximately €3.8 billion, and the annual deficit of the pension system was €2.5 billion[1602]. 2002 saw the introduction of the calculation formula taking into consideration the earnings from 40 years of the participation in the system multiplied by 14[1603]. The possibility of opening company pension schemes as solutions belonging to the 2$^{nd}$ pillar[1604] was created as well. In 2002, the social security contribution was 34.75% of the salary, out of which 11.00% was covered by the employee and 23.75% by the employer[1605]. The minimum old-age pension was €189.54, and the monthly pension from the non-

[1596] Chuliá E., Asensio M. (2007), p. 635.
[1597] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 258.
[1598] Stańko D. (2004), p. 270.
[1599] Stańko D. (2004), p. 279.
[1600] Stańko D. (2004), p. 281.
[1601] Stańko D. (2004), p. 276.
[1602] Chuliá E., Asensio M. (2007), p. 630.
[1603] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 100.
[1604] *OECD Economic Survey of Portugal 2004: Ageing-Related Pressures on Public Finances* (2004).
[1605] Holzmann R., MacKellar L., Rutkowski M. (2003), p. 39.

contribution system €151.44 for a person up to 70 and €165.64 for a person above 70[1606]. Also in 2002, the average old-age pension for state officials was approximately €930 per month. 175,000 employees participated in the second pillar schemes, and 107,000 persons in the third pillar ones[1607]. In 2003 the contribution paid by the employer in company pension schemes was 3.0%. It was also possible for employees to participate in the gathering of monies for their old-age pension in those schemes[1608]. From 1 January 2004, old-age pensions for civil servants are calculated with reference to 90% of the salary. Towards the end of that year, the value of funds accumulated in the FEFSS was approximately €5.8 billion[1609]. From 1 July 2005, the VAT was increased from 19% to 21% and the funds obtained in such a way earmarked in equal parts for social security and for the pension fund[1610]. 2006 saw the introduction of a solidarity old-age allowance[1611]. First, persons over 80 were eligible for the allowance. On a target basis, such allowance will be available as from 2009 to persons who have reached the age of 65[1612]. In June 2006, 180 professional pension funds were present on the market[1613]. Towards the end of 2006, a total of 232 pension funds operated on the market, the greatest number of them in the banking sector. Out of the above number, more than 94% were closed funds[1614]. The average old-age pension from the CGA scheme was €1,138.74 per month[1615].

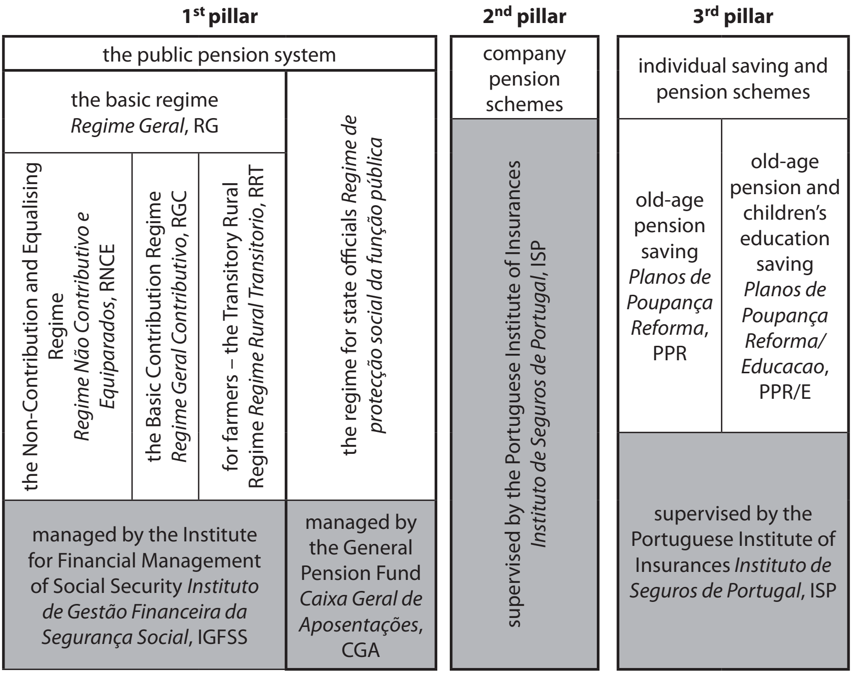
1606 Stańko D. (2004), p. 279.
1607 *The Handbook of Western European Pension Politics* (2007), p. 889.
1608 Natali D. (2004b).
1609 Chuliá E., Asensio M. (2007), p. 605.
1610 *Wyższy VAT w Portugalii* (2005).
1611 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 104.
1612 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 253.
1613 *Portugal shifts from state dependency* (2006).
1614 Pavão Nunes J. (2007).
1615 http://www.cga.pt/numeros_EN.asp, accessed 7 January 2008.

## 2.21.3 The present state of the pension system in Portugal

The Portuguese pension system consists of three pillars[1616]: 1) the public pension system as the 1st pillar, 2) company pension schemes as the 2nd pillar and 3) individual saving and pension schemes as the 3rd pillar. In addition to those, there are other pension solutions for the financial and telecommunications sectors and for lawyers[1617]. The present state of the pension system in Portugal is presented in **Scheme no. 21**.

**Scheme no. 21**

**The present state of the pension system in Portugal**




Source: Own elaboration.

[1616] Stańko D. (2004), p. 271.
[1617] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 100.

**The public pension system** functions in the pay-as-you-go formula and is a compulsory system with a defined benefit financed by the contributions contributed by employers, employees and by the budgetary subsidy. There are two main regimes in the system: A) the basic regime (*Regime Geral*, RG), and B) the regime for state officials (*Regime de protecção social da função pública*) managed by the CGA and most often identified by that very abbreviation.

**The basic regime** contains three schemes: a non-contribution one: a) the Non-Contribution and Equalising Regime (*Regime Não Contributivo e Equiparados*, RNCE), and two contribution schemes: b) the Basic Contribution Regime (*Regime Geral Contributivo*, RGC) and c) the Transitory Rural Regime (*Regime Rural Transitorio*, RRT) for farmers. 2-4% of the contribution paid by the employees and any surpluses and capital gains of the basic regime are paid to the Fund for Financial Stabilisation of Social Security (*Fundo de Estabilização Financeira da Segurança Social*, FEFSS)[1618]. All the schemes are managed by the Institute for Financial Management of Social Security (*Instituto de Gestão Financeira da Segurança Social*, IGFSS)[1619].

**The non-contribution scheme** (RNCE) may be regarded as a kind of 'zero pillar' as it is financed by public taxes, first of all by the VAT (*social VAT*), without contributions. In that system, benefits in the form of an old-age welfare allowance (*complemento social*) are paid to persons who reached the retirement age, and whose income from other sources does not exceed 30% of the minimum salary (*Salário Mínimo Nacional*, SMN). In addition, persons over 70 receive a solidarity allowance in relation to their old age[1620].

1618 *OECD Economic Survey of Portugal 2004: Ageing-Related Pressures on Public Finances* (2004).

1619 http://www.portaldocidadao.pt/PORTAL/entidades/MTSS/IGFSS/pt/ORG_instituto+de+gestao+financeira+da+seguranca+social.htm, accessed 7 January 2008.

1620 Introduced in 2006, the solidarity allowance was first paid to persons aged 80, in 2007 to those aged 75, and old-age pensioners aged 65 and more will be eligible for the allowance on a target basis in 2009.

In **the basic scheme** (RGC) the retirement age is 65 for both sexes. In the case of certain professional groups, the standard retirement age is younger than the above, this being 60 (for flying staff in the aviation sector), 55 (for port employees, merchant navy seamen, fishermen, air traffic controllers and for ballet artists)[1621], or even 50 (for miners)[1622]. For other professional groups, early retirement is possible at the age of 55 on condition of 30 years of participation in the system[1623]. In such a case, however, the old-age benefit is reduced by 4.5% for each year until the statutory retirement age is reached. The old-age benefit is not decreased in the case of the unemployed to have turned 60 and when a retiring person has participated in the system for over 30 years. In such a case, every three years of participation over 30 years compensates for one year of early retirement[1624]. It is also possible to delay retirement, not later, however, than at 70 years of age. In such a case the old-age benefit is increased by 10% for each year after the statutory retirement age has been reached. The social security contribution (*taxa social única*, TSU) is 34.75% of the salary, out of which 11.00% is paid by the employee and 23.75% by the employer. The above contribution covers both the old-age pension and benefits concerning other social risks such as disability, family benefits following the death of the insured, unemployment and poverty, provided that 16.01% of the salary pays for old-age pension payments, 3.42% disability pensions, and 3.67% family pensions[1625]. In the case of the self-employed, the compulsory contribution is 25.4% of the reference income[1626]. The reference income is set at 1.5 to 12 times the minimum salary in the economy[1627], and the self-employed may choose

[1621] Ballet artists may retire as early as at the age of 45 but with relevant reduction of the pension benefit.
[1622] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 253.
[1623] Whitehouse E. (2007), p. 107.
[1624] Chuliá E., Asensio M. (2007), p. 627.
[1625] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 100.
[1626] Chuliá E., Asensio M. (2007), p. 629.
[1627] In 2006, the minimum salary in the economy was €384.90 per month. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 253.

one out of eleven income levels related to a specific amount of the benefit. A compulsory contribution covers the risks of old-age, disability, maternity, occupational diseases and those concerning the payment of family benefits. In addition, the self-employed may pay a voluntary contribution being 32% of the reference income for insurance cover within the scope of health insurance[1628]. Contributions must be paid for a minimum of 15 years provided that a contribution year is such in which contributions have been paid for at least 120 days[1629]. Apart from contributions, old-age pensions are financed by a budgetary subsidy amounting to 3% of VAT collected[1630]. The old-age pension depends on the earnings throughout the entire period of professional activity, such a period, however, cannot not be longer than 40 years[1631]. On one hand, for people with the participation period in the system being less than 20 years, the old-age pension is calculated with reference to the following formula:

$$P = 2\% \bullet N \bullet R,$$

where:
P – a monthly old-age pension,
2% – an annual accumulation rate,
N – years of the participation in the scheme,
R – the base salary.

On the other hand, in the case of those participating in the scheme for more than 20 years, the accumulation rate is between 2.0 and 2.3% and depends on the relationship between the individual's salary and the minimum national one[1632]. The base salary is calculated with reference to the following formula:

1628 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 100.
1629 Chuliá E., Asensio M. (2007), p. 627.
1630 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 253.
1631 http://www.bpipensoes.pt/ProteccaoReforma/RegimeGeralSegSocial.asp, accessed 4 January 2008.
1632 Whitehouse E. (2007), p. 107.

$$R = E/N \bullet 14,$$

where:
E – the average monthly salary,

provided that N cannot be more than 40 and, if the number of years of participation in the scheme is actually greater than the above number, 40 years with the highest earnings is taken into consideration. In order to determine the average monthly salary, the actual remuneration is indexed in the following way: 1) in the case of salaries obtained until 31 December 2001, by means of the consumer price index (CPI) not including the price of apartments, and 2) in the case of salaries obtained after 31 December 2001, by means of a combined index recognising the consumer price index in 75 % and the improvement wage index (IWI) in 25%. Old-age pensions are paid 14 times a year thus including two bonus payments[1633]. Old-age pensions are subject to personal income tax, however, the retention allowance is higher than that in the case of payments from sources other than the old-age pension[1634]. Old-age pensioners do not pay social security contributions either[1635].

**Scheme for farmers**. The Transitory Rural Regime (RESSAA/RRT) has been closed to new participants since 1986. It is estimated that the scheme should expire naturally in 2025[1636].

**The regime for state officials** (CGA) is diminishing and those employed after 31 December 2005 do not participate in it thus joining the RGC[1637]. In 2008 the retirement age for the full old-age pension is 61.5 years provided that the participation period is 36 years[1638]. A person may

[1633] Bonus payments are made in July and before Christmas. Cf.: Whitehouse E. (2007), p. 107.
[1634] The retention allowance for income related to the old-age pension was €7,805.60 annually.
[1635] Whitehouse E. (2007), p. 108.
[1636] Chuliá E., Asensio M. (2007), p. 656.
[1637] *Retirement and Survivor Pensions Schemes – Explanatory Booklet* (2006).
[1638] The retirement age will be increased by six months every year until the target age of 65 is reached in 2015.

retire also when he or she has acquired the minimum required period of participation, that being five years. In such a case, the retirement age is 70. Early retirement is possible at any age provided that the retiring person's period of participation in the system is 37.5 years[1639]. A contribution towards the old-age pension is 10% of the salary, out of which 7.5% is earmarked for the employees' old-age pensions, and 2.5% for those of his or her family. The last salary is a basis for the calculation of the old-age pension of those who retired until 31 August 1993, and the average salary from the entire period of their professional carrier[1640] for the pensions of those retiring after the above date. The old-age pension is calculated with reference to the following formula:

$$P = (R \bullet 90\% \bullet T)/36,$$

where:

P – the monthly old-age pension,
R – the last or average salary,
T – the number of years of actual participation in the scheme.

The scheme is managed by the General Pension Fund (*Caixa Geral de Aposentações*, CGA) situated in the structure of the Ministry of Finance (*Ministério das Finanças e da Administração Pública*)[1641].

**Company pension plans** are voluntary and their existence depends on the employer. They may be pursued in three forms: 1) individual old-age pension insurance at life insurance societies paid by the employer, 2) individual accounts in open or closed pension funds subsidised by the employer, and 3) the purchase by the employer of group saving plans in open pension funds. A pension fund is called open when no form of a relationship with the participants is required. When such a

[1639] The participation period required for early retirement will be extended by six months every year until the target period of 40 years is achieved in 2013. Cf.: *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 100.
[1640] http://www.cga.pt/aposentacao_EN.asp, accessed 4 January 2008.
[1641] http://www.cga.pt/cgaInicio.asp, accessed 4 January 2008.

relationship is required, a pension fund is a closed one. Contributions paid by employers may be included as their allowable costs up to the level of 15% of the salaries[1642]. More than 80% of all the funds offer pension schemes with a defined benefit. Funds may be managed by life insurance societies or companies dedicated to such a purpose, which are supervised by the Portuguese Institute of Insurances (*Instituto de Seguros de Portugal*, ISP)[1643]. Less than 10% of employees participate in company pension schemes.

**Individual saving and pension plans** are implemented voluntarily at life insurance societies or in old-age pension and investment funds. The plans may be old-age pension saving (PPR) or old-age pension and children's education (PPR/E) saving ones. Contributions towards individual old-age pensions reduce a personal income tax assessment basis to the level of 20% of income[1644]. Old-age pension payments are only possible upon a person reaching at least 60 years of age and having a five year period of participation in the scheme. Individual schemes are supervised by the Portuguese Institute of Insurances (*Instituto de Seguros de Portugal*, ISP).

### 2.21.4 Challenges and planned changes in the pension system in Portugal

Keeping the stability of the pension system and provision of an adequate standard of living for persons living on a pension, even for the poor[1645], are the greatest challenges of the pension system in Portugal. The system for state officials, with the replacement rate being most frequently 100%, and with a deficit generated for years, is another problem. The demographic situation in Portugal is of smaller importance for the

[1642] *The Handbook of Western European Pension Politics* (2007), p. 889.
[1643] http://www.isp.pt/NR/exeres/97C24D91-5FD7-4874-9D7D-FFE049D206D9.htm, accessed 4 January 2008.
[1644] *The Handbook of Western European Pension Politics* (2007), p. 889.
[1645] Stańko D. (2004), p. 280.

pension system in that country compared with other ones. A low GDP growth and relatively high unemployment rates are not conducive to the increase in budgetary spending. Planned changes are related, first of all, to making people reluctant to retire early, and the proposed penalty for such retirement will be increased from 4.5% annually to the level of 6.0% annually[1646]. Moreover, planned is a change of the calculation formula for the base old-age pension in consideration of the demographic stability coefficient[1647].

### 2.21.5 Summary

The pension system in Portugal is based on the Bismarck's formula completed with the Beveridge's welfare solution. A very strong 1st old-age pension pillar functioning in the pay-as-you-go formula causes a very strong relationship between old-age pensions and the politicians' will. Capital funds, both professional and individual, are of minor importance in Portugal. Without financial assistance in the form of a budgetary subsidy, the pension system in that country ceases to be viable and generates a deficit every year.

In comparison with other countries, the use of a certain amount of income from VAT to finance the pension system is an interesting solution.

## 2.22 ROMANIA

### 2.22.1 General information about the country

Romania[1648] (*România)* is a republic located in the south-eastern part of Europe, on the Black Sea. It consists of 41 counties (*județe)* and one municipality (*municipiu)*.

[1646] *Portugal shifts from state dependency* (2006).
[1647] *The Pensions System Reform (Portugal)* (2007).
[1648] *Wielka Encyklopedia PWN* (2004), v. 24, pp. 71 and further.

The official language of Romania is Romanian. The largest ethnic group were Romanians, who constituted 89.5% of the population and the main national minorities were Hungarians, who made up 6.6% of the population and Roma – 2.5%. Members of the Romanian Orthodox Church accounted for 86.8% of the population, various Protestant denominations – 7.5%, and Roman Catholics – 4.7%.

According to the Constitution of Romania of 1991, the President is the head of state, and the Prime Minister is the head of government.

In 2004 Romania became a member of the NATO, and in 2007 joined the European Union.

Romanian currency is the leu (RON[1649], *leu*).

In 2007 the GDP *per capita* (PPP) was estimated at US$11,100, and the GDP growth rate was recorded at 5.9%. The public debt constituted 18.7% of the GDP. In 2007 the current account balance showed a deficit of US$20.95 billion.

The unemployment rate amounted to 4.5%.

In July 2007 Romania had a population of 22,276,056[1650] with the following age structure: 0-14 years of age – 15.6%, 15-64 years of age – 69.6%, 65 years of age and over – 14.7%. Life expectancy at birth for the total population was 71.91 years, for men 68.41 years and for women 75.62 years.

### 2.22.2 Historic development of pension system in Romania

The beginning of the Romanian pension system dates back to **1912**, when the first law concerning pension system, health insurance and

[1649] On 1 July 2005, the previous leu was re-valued at the rate of 10.000:1. The new currency possesses the ISO 4217 code RON. The `old´, as well as the `new´ leu was in circulation by the end of 2006. On 31 December 2007, EUR1 was worth RON3.6077. Cf.: http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-ron.en.html, accessed 22 February 2008.

[1650] https://www.cia.gov/library/publications/the-world-factbook/geos/ro.html, accessed 31March 2008.

accident insurance was adopted[1651]. In 1944 the first law in the area of family allowances was introduced[1652]. During Ceausescu's rule there were separate systems for industrial workers, farmers, artists, dockers, the clergy, and many other sorts of professionals[1653]. Pension contributions were formally transferred by a social security fund to a central budget, and pension benefits were very unstable and of low value. The binding system functioned on the pay-as-you-go basis but many people who did not pay contributions were left out of the system. In 1966 Ceausescu introduced a total ban on abortion, which resulted in a very high fertility rate among Romanian women, estimated at 3.7 in 1967-1968[1654]. In 1968 an auxiliary pension plan was introduced, in which a pension contribution, paid by an employee, amounted to 3% of the remuneration. An auxiliary pension from this plan made up 8 % of an average remuneration over 5 best years within the period of 10 last years preceding the retirement. It determined the replacement rate at 16% after 25 years of work. The law of 1977[1655] defined the replacement rate for new pensioners as 75% of the average remuneration over the best 5 years within the period of the last 10 years preceding the retirement. Pension contributions paid by an employer amounted to 14% of remunerations. The retirement age for men was 65 and for women – 60. Another pension plan applied to farmers, employed in agricultural cooperatives. In 1989 the right to take retirement 5 years early was introduced for men with the period of employment of 30 years and women with the period of employment of 25 years. Then, the employees working in difficult conditions could take advantage of retiring at the age of 55 for men and 50 for women, and those working in very difficult conditions (group I) could retire at the age of 50 in the case of men and 45 in the case of women. In 1989 the rate of fertility

[1651] *Social Security Programs Throughout the World: Europe, 2006* (2006), pp. 261, 263 and 264.
[1652] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 266.
[1653] de Melin G. and Sheshinski E. (2002), pp. 402-403.
[1654] Uegaki A. (2003), p. 4.
[1655] The Act 3 of 1977. Cf.: Vilnoiu M., Abagiu Adagiu. (2003), p. 53.

among Romanian women amounted to 2.2[1656]. In 1990 agricultural cooperatives were dissolved. In the same year the retirement age for men was decreased to 60 years and for women to 55 years[1657]. The rate of people at the age of 65 amounted then to 10.3%[1658] of the population, the number of pensioners – 3.4 million[1659] people and pension contributions were paid by 8 million people[1660]. In 1991 the first law concerning unemployment was implemented[1661]. In 1992 pension contributions of farmers were no longer obligatory[1662]. In the same year a pension contribution already amounted to 25.5% of remuneration, and the standard retirement age was 62 for men and 57 for women. In 1993 the law concerning family allowances was amended[1663]. *The White Paper* issued in the same year pointed out the necessity of carrying out a reform of pension system[1664]. In 1995 the National Securities Commission (*Comisia Națională a Valorilor Mobiliare*, CNVM)[1665] and the Bucharest Stock Exchange (*Bursa de Valori Bucuresti*, BVB)[1666] were established. In 1996 the rule of calculating pensions based on the average remuneration over 5 best years within the period of 10 years before the retirement was introduced[1667]. Another *White Paper* on pensions of 1997 suggested the necessity of establishing the 2$^{nd}$ pillar in the form of capital pension funds[1668]. The chance of early retirement, high unemployment and the exclusion of farmers from the system resulted in a sharp decline in the number of people paying pension contributions. From 1990 to 1998 their

[1656] Zaman G., Vasile V. (2001), p.10.
[1657] Pop C., Calugaru A. (2004), p.1.
[1658] *Greek Book Regarding Demography – Romania* (2006), p. 6.
[1659] *National Strategic Report Concerning Social Protection and Social Inclusion* (2006), p. 29.
[1660] Haag A. (2006).
[1661] *Social Security Programs Throughout the World: Europe, 2006.* (2006), p.265.
[1662] Zaman G., Vasile V. (2001), p. 30.
[1663] *Social Security Programs Throughout the World: Europe, 2006.* (2006), p. 266.
[1664] Pop C., Calugaru A., (2004), p. 1.
[1665] http://www.cnvmr.ro/, accessed 9 January 2008.
[1666] http://www.bvb.ro/About/Presentation.aspx?t=1, accessed 9 January 2008.
[1667] Zaman G., Vasile V. (2001), p. 28.
[1668] Pop C., Calugaru A. (2004), p. 1.

number decreased by about 3 million[1669], out of which permanently unemployed people constituted about 1 million[1670] and the dependence rate, expressed in the form of a ratio of a number of pensioner to the number of people at the age of 15-60, rose from 17 to 28% at that time[1671]. Within the same period of time, the real value of remuneration declined by almost 50% and the ratio of the average pension to the average remuneration went down from 44.7% in 1990 to 35.6% in 1998[1672]. In 1998 upon the abolition of anti-abortion law of 1966, a fertility rate among Romanian women amounted to only 1.3[1673]. In the same year, a non-governmental organization called *Pro Democratia* presented to the public a draft of the bill that embraced the 2nd and the 3rd pension pillars[1674]. In January 1999 the basic and auxiliary pension insurance contributions were merged into one and its total value was raised from 28.5% (an obligatory contribution – 25.5%, an auxiliary contribution – 3.0%) to 37.5% of remuneration, out of which the employer paid 32.5% and the employee – 5.0%[1675]. In 1999 voluntary contributions for farmers amounted to 7% but they were paid only by 5% of farmers. Despite a high inflation rate, there was no regulation concerning the indexation of remunerations taken into account while calculating pensions and already granted pensions. Pensions valorisation was executed in the form of single governmental decisions. In 2000 accident insurance law was revised[1676]. In the same year, an average *de facto* retirement age was 52 for women and 57 for men[1677]. In November 2000 a new pension system law, which included the 2nd pillar, was adopted. New institutions such as universal pension funds (*Fonduri Universale de Pensii*, FUP) were to come into

[1669] de Melin G. and Sheshinski E. (2002), p.405.
[1670] Mangan G. (2001).
[1671] Holzmann R., MacKellar L., Rutkowski M., (2003), p. 40.
[1672] Vilnoiu M., Adagiu C., (2003), p. 10.
[1673] Zaman G., Vasile V. (2001), p. 10.
[1674] Pop C., Calugaru A. (2004), p. 1.
[1675] Holzmann R., MacKellar L., Rutkowski M., (2003), p. 40.
[1676] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 264.
[1677] Chiriac M. (2000).

being on its basis. 10% of remuneration[1678] out of the contribution paid to the 1st pillar[1679] was to be transferred obligatorily to these funds. The funds were to function based on a defined contribution and were to invest accumulated assets on capital markets. Every member of the fund was to possess his or her own account and a complete record of accumulated assets. The 2nd pillar, however, did not start working directly after the introduction of the law. The reform of 2000 launched a universal pension contribution of 30% of the remuneration and included farmers and the self-employed, who paid a contribution on a declared income, into a basic scheme. A point system, basing the level of pensions on remuneration from the whole period of employment, was implemented. A new institution called the National House of Pensions and Other Social Insurance Rights (*Casa Nationala de Pensii si Alte Drepturi de Asigurari Sociale*, CNPAS) was set up to deal with pension issues[1680]. All that constituted the basis of the 1st pension pillar. Furthermore, the retirement age was raised for men to the age of 65 and for women to 60[1681.] The contribution period required for the full pension was increased from 30 to 35 years for men and from 25 to 30 years for women. The required minimum contribution period was also raised from 10 to 15 years[1682]. At the end of 2000, an average full pension of basic plan was equal to €49.0[1683]. In January 2001 there were 6 million retired people in Romania, while the active population accounted for 4.5 million[1684]. On 1 April 2001, legislative changes concerning the 1st pillar came into force[1685] and a pension point value was estimated at 38% of the average gross

[1678] Mangan G. (2001).

[1679] Holzmann R., MacKellar L., Rutkowski M., (2003), p. 40.

[1680] http://www.cnpas.org/, accessed 9 January 2008.

[1681] The ultimate retirement age was to be achieved gradually within 13 years of the implementation of the Act of Parliament 19/2000, which was published on 1 April 2001. Cf.: Vilnoiu M., Abagiu C. (2003), p. 45.

[1682] Like in the case of the retirement age, the adjustment was to be carried out within 13 years.

[1683] Viloiu M., Adagiu C. (2003).

[1684] *IMF Calls for a Reform of Romania's Pension System* (2001).

[1685] Pop C., Calugaru A. (2004), p. 2.

remuneration in the economy[1686]. In December 2001 the level of the pension point was raised to 38.5% of the average gross remuneration in the economy[1687], and in November 2002 to 39%. In 2002 the unemployment law was revised[1688]. According to the reform of 2000, the 2nd pension pillar was to start functioning on 1 January 2003[1689]. Those funds were to be managed by private investment companies. However, due to their lack, the management was to be carried out by certified depositaries, who received a CNVM license. Managing companies were required to have a minimum start-up capital of €10 million, out of which at least €5 million should be permanently available in cash on the territory of Romania. However, legislative regulations of 2002 postponed the implementation of law concerning the 2nd pension pillar to 2005[1690.] Upon the legislative changes, the level of a contribution transferred to the 2nd pillar by the CNPAS was to achieve the initial value of 2% and ultimately – growing annually by 0.6% – the value of 8%[1691]. Funds were to be mandatory for all those who were to retire in more than 20 years[1692]. In 2003 the remuneration of 24% of women and 14% of men over 65 were below the poverty line[1693]. On 26 May 2004, the Association of Privately Managed Pensions in Romania (*Asociatia pentru Pensiile Administrate Privat din Romania*, APAPR)[1694] came into being. In June 2004 regulations concerning the 3rd pension pillar were adopted[1695]. It allowed creating voluntary auxiliary pension schemes, which would be financed by employers and managed by banks or life insurance companies, which

[1686] Vilnoiu M., Abagiu C. (2003), p. 60.
[1687] http://www.cnpas.org/portal/media-type/html/language/en/user/anon/page/legislation.psml?mode=article&container=RSS_Lows_en&article=4#container-RSS_Lows_en, accessed 9 January 2008.
[1688] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 265.
[1689] Holzmann R. and Hinz R. et al. (2005), p. 155.
[1690] http://www.ingfn.ro/?m0=2&m1=4&lang=en&id=224264, accessed 11 January 2008.
[1691] Preda M., Dobos C., Grigoras V. (2004), p. 51.
[1692] Holzmann R. and Hinz R. ed. (2005), p. 155.
[1693] *Joint Report on Social Protection and Social Inclusion 2007, Social Inclusion, Pensions, Healthcare and Long Term Care* (2007), p. 359.
[1694] http://www.apapr.ro/#, accessed 12 January 2008.
[1695] Pop C., Calugaru A. (2004), p. 2.

were able to establish pension funds for at least 100 members[1696]. Payments into such a fund were subject to a tax relief equal to the annual amount of €200[1697]. In October 2004 the law concerning the 2nd pension pillar was revised[1698]. Therefore, obligatory individual pension accounts were to be opened from 1 July 2006[1699] for all people who were older than 35 and voluntary pension accounts for people aged 35-45. At first, a minimum pension contribution was to be equal to 2% of the gross remuneration, and ultimately it was to reach the level of 6% in 2014. The required minimum number of members for universal pension funds was estimated at at least 50,000 people[1700]. At the beginning of 2005, the regulations of 2004 concerning the 3rd pension pillar came into force[1701]. According to the law of June 2005[1702], which was confirmed in November 2005[1703], the Private Pension Supervision Commission (*Comisia de Supraveghere a Sistemului de Pensii Private*, CSSPP)[1704] was established. Its main task was to supervise the 2nd and 3rd pillar pension funds. The health insurance law was revised in the same year[1705]. *The Green Book on Demography* was published on 5 April 2006[1706]. In May 2006 regulations concerning the 3rd pillar were amended[1707]. In 2006 the average monthly remuneration

1696 Pop C., Calugaru A. (2004), p. 9.

1697 Preda M., Dobos C., Grigoras V. (2004), p. 52.

1698 It was revised by an act of Parliament – Lege nr. 411/2004 privind fondurile de pensii administrate privat. Cf.: http://w4.csspp.ro/ro/pdf/romana/legislatie/legi/legea-411-2004-republicata.pdf, accessed 12 January 2008.

1699 First contributions were to be transferred into those accounts from 1 January 2007 on.

1700 Pop C., Calugaru A. (2004), p. 8.

1701 Cf.: Seitan M. (2004). Due to the lack of regulations concerning the supervisory institution, the first pension funds of the 3rd pillar were established in 2007.

1702 Ordonanță de urgență nr. 50 din 09/06/2005. Cf.: http://w4.csspp.ro/ro/index.php?option=com_content&task=view&id=22&Itemid=34, accessed 9 January 2008.

1703 Act of Parliament Legea nr. 313/2005. Cf.: http://w4.csspp.ro/en/index.php?option=com_content&task=view&id=20&Itemid=33, accessed 12 January 2008.

1704 http://w4.csspp.ro/ro/, accessed 9 January 2008.

1705 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 263.

1706 *Green Book Regarding Demography – Romania* (2006).

1707 Act of Parliament Lege nr. 204/2006 privind pensiile facultative. Cf.: http://w4.csspp.ro/ro/pdf/romana/legislatie/legi/legea-204-din-2006-privind-pensiile-facultative.pdf, accessed 12 January 2008.

in the economy amounted to RON1,077[1708]. In March 2007 it was decided that the deadline of transferring contributions to the 2nd pillar was rescheduled to the beginning of 2008. It was also decided that the contribution transferred to universal pension funds should be equal to 2% in 2008 and then, it should be gradually increased by 0.5% every 1 January until it reaches the level of 18% in 2016[1709]. At the beginning of 2007, the average employee pension was equal to RON363 a month, and the average farmer's pension – RON140 a month[1710]. The first 3rd pillar pension funds and the 2nd pillar universal pension funds came into being in 2007. On 3 April 2007, the first company managing the 3rd pillar funds was registered and on 15 May 2007 the first three 3rd pillar pension funds started working[1711]. On 25 July 2007, the first three private companies managing the 2nd pillar funds were registered and on 21 August 2007 the first five universal pension funds were registered[1712]. On 17 September 2007, universal pension funds started canvassing clients[1713]. On 1 January 2008, the CNPAS began transferring contributions to the 2nd pillar pension funds[1714].

### 2.22.3 The present state of the pension system in Romania

The Romanian Pension System consists of three pillars: 1) the 1st pillar embracing basic universal and mandatory pension insurances, 2) the 2nd pillar embracing mandatory capital insurances, and 3) the 3rd pillar

1708 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 262.

1709 Governmental regulations Ordonanță de Urgență nr. 112/2007 din 22/10/2007. Cf.: http://w4.csspp.ro/ro/images/pdfdox/oug-112-pe-2007-modificare-411-si-204.pdf, accessed 12 January 2008.

1710 *Legal Framework Regarding a Minimum Income, Health and Care Services for Older Persons in Romania* (2007).

1711 http://w4.csspp.ro/ro/index.php?option=com_content&task=view&id=72&Itemid=66, accessed 12 January 2008.

1712 http://w4.csspp.ro/ro/index.php?option=com_content&task=view&id=56&Itemid=65, accessed 12 January 2008.

1713 The process of canvassing should finish on 17 January 2008. Cf.: Trandafir G. (2007).

1714 *National Strategic Report Concerning Social Protection and Social Inclusion* (2006), p. 27.

embracing voluntary private pensions[1715]. Separate regulations apply to lawyers and other freelancers[1716], military personnel and the clergy[1717]. In addition, the social security system pays allowances to people who do not earn more than RON96 a month[1718]. The present state of the pension system in Romania is presented in **Scheme no. 22**.

**Scheme no. 22**

**The present state of the pension system in Romania**

| **1st pillar** | **2nd pillar** | **3rd pillar** |
|---|---|---|
| basic universal and mandatory pension insurances | mandatory capital pension insurances | voluntary private pensions |
| managed by the National House of Pensions and Other Social Insurance Rights *Casa Nationala de Pensii si Alte Drepturi de Asigurari Sociale*, CNPAS | the Private Pension Supervision Commission *Comisia de Supraveghere a Sistemului de Pensii Private*, CSSPP | the Private Pension Supervision Commission *Comisia de Supraveghere a Sistemului de Pensii Private*, CSSPP |

Source: Own elaboration.

The system of **basic universal and mandatory pension insurances** embraces the employed with individual labour contracts, civil servants, judges, diplomatic personnel and members of sea cooperatives. The system is voluntary for farmers and the self-employed. The pension contribution equals 30% of the gross remuneration[1719], out of which the employee pays 9.5% and the

1715 *National Strategic Report Concerning Social Protection and Social Inclusion* (2006), p. 27.

1716 Services concerning those pensions are delivered by Casa Judeteană de Pensii Harghita. Cf.: http://www.cjphr.ro/, accessed 9 January 2008.

1717 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 261.

1718 *Legal Framework Regarding a Minimum Income, Health and Care Services for Older Persons in Romania* (2007).

1719 In the case of the 2nd pillar members, since 1 January 2008, 2% of the CNPAS contribution has been transferred to universal pension funds.

employer pays 20.5%. In the case of the 2nd pillar members, 2% is transferred to universal pension funds and 28% remains in the 1st pillar. The contribution paid by the employer for those working in difficult conditions amounts to 25.5% and that for people working in very difficult conditions – 30.5%. Voluntarily insured people contribute 30% of the declared income. A contribution is paid in relation to the monthly salary at the level equal to five times the national monthly average salary[1720]. The retirement age for men is 63 and for women 57 years and 9 months[1721]. The minimum contribution period for the full pension amounts to 11 years for men and 10 years and 9 months for women[1722]. The full pension is obtained by men after 31 years of contributions and by women after 25 years and 9 months of contributions[1723]. Early retirement is possible from up to 5 years before the standard retirement age provided the contributions have been paid for the last 10 years. The pension depends on the number of points accumulated within the whole contribution period and on the number of years of contributions[1724]. To obtain an average number of pension points, the lifetime number of accumulated points is divided by the number of years of contributions. The number of pension points obtained during one year is calculated by dividing the gross remuneration by of the average remuneration. The number of points, however, cannot be higher than 3. The value of pension point is calculated based on a factor that cannot be lower than 30% or higher than 50% of the average remuneration[1725], and since 2003 it has been equal

[1720] In 2006 the average salary was equal to RON1,077, while the maximum pension contribution point value was – RON5.385 a month. Cf.: *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 261.

[1721] The retirement age is being gradually raised to 65 for men and to 60 for women. It will have been achieved by December 2014 for men and by January 2015 for women. Cf.: *National Strategic Report Concerning Social Protection and Social Inclusion* (2006), p. 26.

[1722] The minimum contribution period is being gradually raised to 15 years in 2014 for women and in 2015 for men.

[1723] That period is being gradually raised to 35 years in 2014 for men and to 30 years in 2015 for women.

[1724] Vilnoiu M., Abagiu C. (2003), p. 59.

[1725] In 2007 the pension point value was equal to RON396.20, and the maximum pension amounted to RON1,270.00 a month. Cf.: http://www.cnpas.org/portal/media-type/html/language/ro/user/anon/page/pensions.psml?weblog_name=pensions&subject_id=1141805689624, accessed 9 January 2008.

to 39%. The pension is calculated by multiplying the number of points by the value of a single point. The system does not stipulate the minimum pension[1726]. The system is managed by the CNPAS.

**Mandatory capital insurance** was started in the area of opening pension funds in 2007[1727] and on 1 January 2008, in the area of transferring contributions. That pillar did not embrace those older than 45 on 1 January 2008. It was voluntary for people who were at the age of 35-45 on that day and obligatory for people who were younger than 35. This insurance is a universal pension fund, to which 2% of a gross remuneration is transferred[1728]. There were 18 universal pension funds on the market[1729]. Initial statistics estimated the number of members of that system at 2.7 million people[1730]. During the first stages of canvassing, the majority of fund members chose pension funds with foreign capital[1731]. Due to the innovativeness of such a solution, no pensions have been paid out of this pillar yet.

**The 3rd pillar**, which embraces voluntary private pensions, consists in transferring pension money by the employer to pension plans offered by banks and life insurance companies in pension funds. On the market there were 6 companies managing altogether 7 pension funds[1732]. A managing company willing to provide the 3rd the pillar pension funds is required to possess the assets equal to €1.5 million[1733]. The 3rd pillar contributions are subject to tax incentives. The required retirement age to obtain a pension is 60 years but

1726 Goedemé T. (2005), p. 3, and Goedemé T. (2006).
1727 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 261.
1728 Every January that contribution is raised by 0.5% until it reaches the level of 6% of remuneration in 2016.
1729 http://w4.csspp.ro/ro/images/pdfdox/comparatie-fonduri-de-pensii-pilon-ii-30.10.2007.pdf, accessed 9 January 2008.
1730 Pescaru D. (2007).
1731 These were the ING Pension Fund, the Allianz-Țiriac Pensions, and the Aviva Pension Fund. Cf.: *Romania's pension funds, safer than European funds* (2007).
1732 http://w4.csspp.ro/ro/images/pdfdox/comparatie-fonduri-de-pensii-pilon-iii-10.08.2007.pdf and http://w4.csspp.ro/ro/index.php?option=com_content&task=view&id=72&Itemid=66, accessed 12 January 2008.
1733 Cristea M., Criveanu R. (2007).

there is an additional requirement, according to which the contribution period must not be shorter than 90 months. According to the initial statistics, there are 300,000 people taking part in voluntary private pensions[1734]. A very high return on investment in 2007 should encourage people to participate in voluntary private pension plans[1735].

### 2.22.4 Challenges and planned changes in the pension system in Romania

Major problems of the Romanian pension system are: the low level of pension benefits and a worsening demographical situation. Pensions of former agricultural cooperative workers are especially low[1736]. It is very important for a country where 45% of population live in the countryside[1737]. It is predicted that the percentage of people at the age of over 65 will rise to 25% of population in 2050[1738] and in 2025 will already account for 17.6%[1739]. Such a situation, together with a pay-as-you-go system, results in the necessity of maintaining high pension contributions, which in turn decreases the cost competitiveness of the economy. As a result, from 1995 to 2005 the pension system had to be annually subsidized from the government budget[1740]. According to the Report of 2003, another major problem of the Romanian pension system is low effectiveness of collecting pension contributions[1741]. The report of 2006 indicated that 'black market' still constituted a big share of the economy and that the number of those working on the 'black market' was estimated at 1-2 million[1742]. A low number of both: qualified actuaries and qualified

[1734] http://www.iopsweb.org/dataoecd/13/30/38708660.pdf, accessed 12 January 2008.

[1735] Only within one week, from 21 to 28 December 2007, the average growth rate for 7 voluntary pension funds amounted to 39.03%. Cf.: *Romania's seven optional pension funds' net assets up by 39.03 percent in late December* (2008).

[1736] Those pensions amount to 30% of average pensions in the base system. Cf.: Zaman G., Vasile V. (2001), p. 30.

[1737] Mangan G. (2001).

[1738] Holzmann R., MacKellar L., Rutkowski M. (2003), p. 40.

[1739] *Green Book Regarding Demography – Romania* (2006).

[1740] *National Strategic Report Concerning Social Protection and Social Inclusion* (2006), p. 29.

[1741] Vilnoiu M., Abagiu C. (2003), p. 77.

[1742] *National Strategic Report Concerning Social Protection and Social Inclusion* (2006), p. 30.

investment advisors[1743] may slow down the process of moving towards capital pensions. However, joining the European Union is generally perceived to be advantageous for the development of the Romanian economy[1744], and the implementation of the 2nd pillar pension funds is considered favourable for the stability of the pension system.

### 2.22.5 Summary

The Romanian pension system is still based on Bismarck's solutions. The execution of the reform of 2000 is still in the initial stage due to the lack of consistency in its implementation[1745]. For a few years, the Romanians did not manage to establish an institution supervising the 2nd and 3rd pillar private pension funds, which made the introduction of the reform impossible. Only after two years did the supervising institution set up in 2005 grant the first licences in the area of the 2nd pillar pension funds. It is hoped that the reform that started being fully executed at the beginning of 2008 will be successfully implemented and that the obstacles being the result of weak local capital markets will not reduce its importance for the improvement of the financial stability of the pension system.

Romania is a country with great potential but at present it is difficult to identify solutions worth copying in other states.

## 2.23 SLOVAKIA

### 2.23.1 General information about the country

The Republic of Slovakia[1746] (*Slovenská republika)* is a landlocked country situated in the Central Europe, comprising 8 counties (*kraj*).

[1743] Pop C., Calugaru A. (2004), p. 13.

[1744] However, the high number of migrant workers, which is already estimated at about 2.5 million people, may be regarded as a problem. Cf.: Ottawa B. (2007c).

[1745] Only between March 2000 and December 2004 that law was amended 23 times. Cf.: Pop C., Calugaru A. (2004), p. 4.

[1746] *Wielka Encyklopedia PWN* (2004), v. 25, p. 217 and further.

The official language is Slovak. The biggest ethnic group was Slovaks, accounting for 85.8% of the population, and the main national minority were the Hungarians, accounting for 9.7%. The Catholics accounted for 68.9% of all the citizens, various Protestant groups – 10.8%, and the Greek Catholics – 4.1%.

Following the Constitution of 1992, the President is the head of the state, while the Prime Minister is responsible for the government.

On 29 March 2004, Slovakia became a member of the NATO, and on 1 May 2004 – of the European Union.

The currency is the Slovak crown (SKK[1747], *Slovenská koruna*).
The GDP *per capita* (PPP) in 2007 was estimated at US$19,800, and the GDP growth rate at 8.8%, and the public debt amounted to 34.8% of the GDP. The current national balance at the end of 2007 showed the deficit of US$3.119 billion.

The unemployment rate stayed at 8.6%.

In July 2007 the population of Slovakia was 5,447,502 people[1748], with the following age groups: 0-14 years of age – 16.4%, 15-64 years of age – 71.5%, 65 years of age and more – 12.2%. The total average life expectancy at birth was 74.95 years, for men – 71.00 years, and for women – 79.11 years.

### 2.23.2 Historic development of the pension system in Slovakia

The beginnings of the Slovak pension system date back to the Hapsburg monarchy and were a continuation of the system based on the Bismarck model of the Austro-Hungarian Empire. The first legal regulation concerning accident insurance was introduced in 1887[1749], while the one

[1747] According to the ISO 4217 standard. On 31 December 2007, EUR1 was worth SKK33,583. Cf.: http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-skk.en.html, accessed 22 February 2008.
[1748] https://www.cia.gov/library/publications/the-world-factbook/geos/lo.html, accessed 31March 2008.
[1749] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 288.

concerning health insurance, including benefits for the elderly, in 1888[1750]. In **1906** the first regulation concerning white-collar workers was issued[1751]. The Bismarck model stipulated creating separate systems for specific professional groups and at first it concerned civil servants, white-collar workers and miners. In 1924 a regulation concerning blue-collar workers was introduced. These four groups, as well as their employers, jointly paid contributions and the age of retirement was 65[1752]. The pension consisted of a basic part, equal for everyone, and an extra part dependent on contributions paid individually. In 1929 the regulation concerning means-tested social pensions was introduced. In 1945 the first family benefit was issued[1753]. After the start of the Communist rule in 1948, the pension system was nationalized. In 1956 the age of retirement was lowered to 60 for men and 55 for women[1754]. The new rules on accident insurance[1755] and health insurance were established in 1957[1756]. In 1964 the retirement age for women was differentiated according to the number of children to whom they have given birth, i.e. retirement came between 53 and 57 years of age[1757]. In 1965 the accident insurance law was amended[1758]. 1968 was the year of new regulations concerning maternity benefits[1759]. Accident insurance of the self-employed was drawn up in 1990[1760]. In 1991 the first legal regulation on unemployment was introduced[1761] and indexation of pensions started. It was triggered by a 5% excess in the growth threshold for remuneration or by a 10% threshold in the price

1750 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 286.

1751 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 284.

1752 Żukowski M. (2006), p.129.

1753 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 290.

1754 Żukowski M. (2006), p.130.

1755 *Social Security Programs Throughout the World: Europe, 2006* (2006), p.79.

1756 *Social Security Programs Throughout the World: Europe, 2006* (2006), p.78.

1757 The standard retirement age for women was 57, and for each child being born it was lowered by 1 year, yet not lower than to 53 years of age. Cf.: Novysedlak V. (2006), p. 6.

1758 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 288.

1759 *Social Security Programs Throughout the World: Europe, 2006* (2006), p.78.

1760 *Social Security Programs Throughout the World: Europe, 2006* (2006), p.79.

1761 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 289.

index[1762]. In 1994 the health insurance law was amended[1763]. In 1995 the Social Insurance Institution (*Sociálna poisťovňa*, SP) was established[1764], which took over social insurance management from the state budget institutions[1765]. Social insurance contribution stayed at 28%[1766]. In 1996 the opportunity was created for opening voluntary additional pension schemes, which were the elements of the 3rd pillar[1767]. This pillar was based on pension agreements between employers and employees[1768], which were implemented by obtaining a pension insurance policy at insurance institutions created especially for this purpose (*doplnkové dôchodkové poistenie a sporenie*, DDS). Employers were entitled to count a contribution of up to 3% of remuneration as tax deductible expenses, while employees could deduct the sum paid as the 3rd pillar contribution up to the annual amount of SKK24,000 from the tax base for individual income tax[1769]. The minimum number of contribution years in the 3rd pillar was 5 years, and pensions could be paid only after reaching the age of 50[1770]. The 3rd pillar pension schemes were supervised by two ministries: the Ministry for Labour, Social Affairs and Family (*Ministerstvo Práce, Sociálnych Vecí a Rodiny*)[1771] and the Ministry of Finance (*Ministerstvo financií Slovenskej republiky*)[1772]. In 1998 family benefit regulations were amended[1773]. According to the government conception presented in February 2000[1774], from 1 July 2003[1775], it was planned to establish the

1762 Novysedlak V. (2006), p. 6.
1763 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 286.
1764 http://www.socpoist.sk/index/index.php, accessed 15 January 2008.
1765 *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 23.
1766 Palmer E. (2001).
1767 Vagač L., Haulíková L. (2003), p. 40.
1768 *National Strategy Report on Adequate and Sustainable Pensions* (2005), s. 10.
1769 Palmer E. (2001).
1770 *Reforms in Slovakia 2004–2005. Heso Project – Evaluation of Economic and Social Measures* (2005), p. 68.
1771 http://www.employment.gov.sk/new/index.php?SMC=1, accessed 17 January 2008.
1772 http://www.finance.gov.sk/Default.aspx, accessed 17 January 2008.
1773 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 290.
1774 *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 8.
1775 Chlon A., Góra M., Lubyova M., Thompson L. H. (2001), p. 11.

2nd pillar of the pension system in the form of obligatory pension funds. The pension insurance contribution was supposed to stay at 27.5%, with the following division between the 1st and 2nd pillar[1776]: in 2003 the ratio was planned at 24.5/3.0%; then, a linear fall was planned to 22.5/5.0% in 2015, with the target ratio of 18.5/9.0% in 2025[1777]. It was also stipulated that the period of participation in the system required to obtain a full pension would be raised from 25 to 30 years and the retirement benefit calculation period would be lengthened from the best 5 years out of the last 10 before retiring, to 30 years[1778]. The conception also included the creation of the 3rd voluntary pension pillar. In 2000 the Financial Control Office was established (*Úrad pre finančný trh*, UFT)[1779]. In June 2000 there were five voluntary pension funds, with approximately 120,000 members[1780]. In 2001 the average monthly pension contribution stayed at SKK834[1781], while the budget supported the pension system with the sum of SKK4,483.4 million[1782]. Despite this sum, this year's deficit to the system was SKK3,108.7 million. Thus, the total system deficit stayed at about SKK7.6 billion. In 2001 the self-employed, civil servants and local government officials obtained the possibility of participation in the 3rd pillar[1783]. In 2002 the social security contribution amounted to 28% of the remuneration, 6.4% of which was paid by the employee, and 21.6% by the employer. For the unemployed, the same contribution was 28% of the half of the tax base of income tax. Pension contributions for those inactive on the labour market, i.e. students, soldiers in national service, those taking care of children or the disabled, and the unemployed, were paid from the state budget. The average pension equalled approximately

1776 Vagač L., Haulíková L. (2003), p. 70.
1777 Holzmann R. and Hinz R. et al. (2005), p.152.
1778 Palmer E. (2001).
1779 http://www.government.gov.sk/eu/Dokumenty/prehlad_o_novych_instituciach_2001/4finTRH.rtf, accessed 16 January 2008.
1780 Chlon A., Góra M., Lubyova M., Thompson L. H. (2001), p. 10.
1781 Vagač L., Haulíková L. (2003), p. 40.
1782 The author's own calculation based on: Vagač L., Haulíková L. (2003), p. 55.
1783 Palmer E. (2001).

41-42% of the average remuneration[1784]. In the same year, the retirement age for men was 60, while for women it ranged from 53 to 57, depending on the number of children to whom they have given birth. The requirement for obtaining a full pension was a 25-year period of employment[1785]. Each year spent in employment in excess of 25 years was rewarded with a 1% rise in the pension. Early retirement was possible 2 years before the statutory retirement age in the case of permanent unemployment[1786]. The average monthly remuneration was counted as the average from the best 5 years out of the last 10 years before retiring; in addition, a monthly remuneration up to SKK2,500 was taken into consideration in full; one third of a monthly remuneration from SKK2,501 to SKK6,000 was taken into consideration, and for a remuneration from SKK6,001 to SKK10,000 – one tenth. A monthly remuneration exceeding SKK10,000 was not considered in calculating the pension[1787], while the average remuneration in the economic sector exceeded SKK13,500[1788]. The pension calculation base for a person employed in normal conditions accounted for 50% of his or her average remuneration. For those working in difficult or very difficult conditions pensions were calculated with the coefficient of respectively 55% and 60% of their average remuneration. Additionally, newly-granted pensions were increased by the multiplication of the base by the index of 103.5% plus a fixed amount of SKK1,240[1789]. Married women aged over 65 were also entitled to pension if their husbands were entitled to it[1790]. In the same year, for every pensioner, there were three people paying contributions[1791]. Pensions were indexed with the use of

[1784] Holzmann R., MacKellar L., Rutkowski M. (2003), p. 41.
[1785] Novysedlak V. (2006), pp. 4 and 5.
[1786] Vagač L., Haulíková L. (2003), p. 49.
[1787] Thus, the maximum tax calculation base was SKK4,067 (2,500 + 1,167 + 400). Its maximum value for a person working in normal conditions stayed at SKK2,034. Cf.: Vagač L., Haulíková L. (2003), p. 47.
[1788] *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 7.
[1789] Thus, the maximum pension for a person working in normal conditions could amount to SKK5,380 (2,034 + 2,106 + 1,240). Cf.: Vagač L., Haulíková L. (2003), pp. 47 and 48.
[1790] Vagač L., Haulíková L. (2003), p. 31.
[1791] Vagač L., Haulíková L. (2003), p. 39.

the mixed index, which was based on an increase in both the cost of living and prices[1792]. The system was compulsory for all the employed, professional soldiers, policemen, the secret service as well as the self-employed with the annual income of over SKK100,000. The law of May 2002 introduced a gradual levelling of the retirement age for men and women to 60 between 2003 and 2019. At the end of 2002, the highest possible pension was SKK8,697 a month[1793], and in 2003 the average remuneration in the economy stayed at SKK14,365[1794]. In April 2003 the government presented a new overall conception of the social security system reform, which was accepted by the Parliament on 30 October 2003[1795] and came into force as of 2004[1796]. The new system covered five types of risk: 1) health insurance, 2) pension insurance, 3) unemployment insurance, 4) accident insurance, and 5) guaranteed insurance[1797]. Each of the risks was financed by a separate contribution collected for this special purpose. Moreover, a new formula for the 1st pillar pension calculation was developed. Pension points were introduced, which considered the ratio of personal remuneration and average remuneration. The value of the pension point in 2004 was estimated at SKK183.58 and was supposed to be indexed with the index of the average increase in remuneration[1798]. The assumption was that a person with 40 years in employment with an average remuneration in the economy would obtain the 1st pillar pension with the replacement rate of 50%[1799]. The system annulled the minimal pension. Moreover, it was decided that the retirement age for both sexes would increase to the target level of 62 years. From 1 January 2004, the retirement age was supposed to increase each

1792 Vagač L., Haulíková L. (2003), p. 51.
1793 Whitehouse E. (2007), p. 151.
1794 *Pension reform finally a reality* (2004).
1795 Zákon, z 30. októbra 2003 *o sociálnom poistení*, No. 461/2003.
1796 *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 37.
1797 This kind of insurance concerned the employer's insolvency. Cf.: *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 12.
1798 Whitehouse E. (2007), p. 151.
1799 *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 16.

year by 9 months[1800]. The rules of indexation of pensions that had already been granted were changed by applying the mixed index, which was based in 50% on the inflation rate and in 50% on the nominal remuneration increase index[1801]. In 2004 the Reserve Solidarity Fund (*Rezervný fond solidarity*, RFS) started to operate. It was managed by the Social Insurance Institution and contributions in the beginning amounted to 2.75% of remunerations and were paid by employers[1802]. The aim of establishing the Fund was to finance increased demands on the system and a stipulated pension system deficit in the coming years. On 13 January 2004, a new legislation for the 2nd pillar was introduced, according to which 9% of remunerations were paid to the 2nd pillar. Companies which managed the funds were obliged to possess their own assets in the amount of SKK300 million. In May 2004, 585,000 employees participated in the 3rd pillar funds[1803]. In September and October 2004, there were 6 companies managing the 2nd pillar pension funds (*dôchodkové správcovské spoločnosti*, DSS). On 26 October 2004[1804], the law on the 3rd pension pillar was amended[1805]. It enabled people other than employers, who had turned 18, to save for an additional pension in individual pension funds, which were run by banks or life insurance companies[1806]. All the insurance institutions (*doplnkové dôchodkové poisťovní*) operating on the market had to transform into companies managing additional pension funds (*doplnkové dôchodkové spoločnosti*, DDS). Also, the minimum period of participation in the 3rd pillar funds was raised from 5 to 10 years and the minimum age for receiving a pension from 50 to 55, while the total amount of annual contributions to the 3rd pillar, which could be deducted from the individual income tax, was decreased from SKK24,000 to

[1800] *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 20.
[1801] Novysedlak V. (2006), p. 8.
[1802] http://www.siov.sk/siov/dokhtm/5sccf/dokhtm/sp2005zmeny_jan05.htm, accessed 17 January 2008.
[1803] Poklemba P. (2004).
[1804] Zákon z 26. októbra 2004 *o doplnkovom dôchodkovom sporení a o zmene a doplnení niektorých zákonov*, No. 650/2004.
[1805] *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 37.
[1806] *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 10.

SKK12,000[1807]. On 1 December 2004, the Pension Funds Managing Companies Association (*Asociácia dôchodkových správcovských spoločností*)[1808] was established. At the end of 2004 the minimum remuneration in the economy[1809] remained at SKK6,080[1810], the unemployment rate stayed at 18.1%, and the rate of employment of people aged 55-64 was 12.6%[1811] for women, and 40.7%[1812] for men. From 1 January 2005, there was an increase in contributions to the Reserve Solidarity Fund to 4.75% of remunerations[1813]. In 2005, the 2nd and the modified 3rd pension pillars[1814] started operating, supervised by the Financial Control Office. The right to join the 2nd pillar was granted to all those insured before 1 January 2005, except for those who were due to retire within less than 10 years[1815]. Relevant decisions were to be taken until 30 June 2006[1816]. All managing companies were under obligation to open three kinds of pension funds: 1) conservative pension fund, investing only in government bonds and money market instruments, totally avoiding monetary risk, 2) sustainable pension fund, investing up to 50% of its resources in shares and up to 50% in instruments connected with monetary risk, and 3) growth pension fund, investing up to 80% of

[1807] *Reforms in Slovakia 2004 – 2005. Heso Project – Evaluation of Economic and Social Measures* (2005), p. 68.

[1808] The following entities were the founders of the Association: *Aegon d.s.s., a.s., Allianz-Slovenská d.s.s., a.s., ČSOB d.s.s., a.s., ING dôchodková správcovská spoločnosť a.s., Prvá dôchodková sporiteľňa d.s.s., a.s., Sympatia – Pohoda d.s.s., a.s., VÚB Generali d.s.s., a.s. oraz Credit Suisse Life&Pensions d.s.s., a.s.* Cf.: http://www.adss.sk/en/, accessed 15 January 2008.

[1809] The minimal remuneration in the economy is announced in Slovakia on 1 October each year. Cf.: *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 28.

[1810] Whitehouse E. (2007), p. 151.

[1811] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 109.

[1812] *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 20.

[1813] http://www.siov.sk/siov/dokhtm/5sccf/dokhtm/sp2005zmeny_jan05.htm, accessed 17 January 2008.

[1814] *Joint Report on Social Protection and Social Inclusion 2007. Social Inclusion, Pensions, Healthcare and Long Term Care* (2007), p. 377.

[1815] Actually, persons over 52 did not join the system. Cf.: Repa R. (2004).

[1816] *National Strategy Report on Adequate and Sustainable Pensions* (2005), s. 24.

its resources in shares and up to 80% in instruments connected with monetary risk[1817]. Those who were due to retire within less than 15 years were only allowed to choose between a sustainable and a conservative fund[1818]. At the end of 2005, there were 650,000 participants in the 3rd pension fund[1819]. On 1 January 2006, the Financial Control Office was dissolved, and the 2nd and 3rd pillar supervision was taken over by the National Bank of Slovakia (*Národná banka Slovenska*)[1820]. In January 2006, the first two companies managing the 3rd pillar pension funds were registered[1821]. On 7 February 2006, the 2nd pillar had over 1.1 million participants[1822].

### 2.23.3 The present state of the pension system in Slovakia

The Slovak pension system comprises three pillars: 1) the obligatory base system (*priebežne financovaný dôchodkový systém*), i.e. the 1st pillar, 2) the capital system (*dobrovoľný dôchodkový doplnkový systém sporenia*), i.e. the 2nd pillar, and 3) the voluntary capital system of pension savings, i.e. the 3rd pillar. Apart from this, there is a separate pension system for policemen, the employees of the intelligence, and national security office, professional soldiers, customs officers and prison wardens. The present state of the pension system in Slovakia is presented in **Scheme no. 23**.

1817 Poklemba P. (2004).
1818 Curda P. (2006).
1819 Escritt T. (2007).
1820 http://www.nbs.sk/, accessed 15 January 2008.
1821 http://www.nbs.sk/INDEXA.HTM, accessed 15 January 2008.
1822 Ďurianová M. (2006).

**Scheme no. 23**

**The present state of the pension system in Slovakia**

| 1st pillar | 2nd pillar | 3rd pillar |
|---|---|---|
| the obligatory base system following the pay-as-you-go formula *priebežne financovaný dôchodkový systém* | the capital system *dobrovoľný dôchodkový doplnkový systém sporenia* | the voluntary capital system of pension savings |
| | supervised by the National Bank of Slovakia *Národná banka Slovenska* | supervised by the National Bank of Slovakia *Národná banka Slovenska* |

Source: Own elaboration.

**The 1st pillar** is based on contributions and its functioning follows the pay-as-you-go formula. It covers all the employed aged over 18, active military service, parents taking care of small children, the disabled, the self-employed, including farmers, sportspeople and personal and capital partnership partners. Participation in the system is voluntary for those aged 16-18 and the self-employed with the annual income lower than the minimal monthly remuneration in the economy multiplied by 12[1823]. The pension insurance contribution amounts to 18% of the remuneration, 14% of which is paid by the employer and 4% by the employee, and is payable on a minimal monthly income of SKK7,600 to a monthly income of SKK56,283[1824]. In the case of the self-employed, the pension insurance contribution amounts to 18% of their income. Apart from the pension insurance contribution, employers pay contributions to the Reserve Solidarity Fund to the amount of 4.75% of the remuneration. From the contribution collected from the participants of the 2nd pillar, 9% of the remuneration is transferred to the 2nd pillar. The missing resources in

[1823] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 284.

[1824] http://www.socpoist.sk/index/index.php?ids=1469, accessed 15 January 2008.

the system are fully covered by the budget subsidy[1825]. The pension is calculated according to the following formula[1826]:

$$D = POMB \bullet R \bullet ADH,$$

where:

D – the value of pension,

POMB – the average personal remuneration point, calculated on the basis of the OMB, which cannot exceed 3[1827],

R – years of professional career,

ADH – present pension value, i.e. the price of one OMB, which amounts to SKK232.51[1828].

$$OMB = (\Sigma\ VZ)/VVZ,$$

where:

Σ VZ – the annual total of reference base, from which the contribution was paid,

VVZ – general reference base = 12 • the average remuneration in the economy in the whole period of insurance contributions payment.

The retirement age is 62 for men and 59 years and 3 months for women[1829]. In the case of those remaining in work after reaching the statutory retirement age, their continued employment is rewarded by a pension calculated in the following way[1830]:

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1825 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 285.

1826 *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 39.

1827 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 285.

1828 The value of the pension point is annually indexed by the nominal increase index of the average remuneration in the economy. Cf.:http://www.socpoist.sk/index/?ids=1287&lang=sk, accessed 16 January 2008.

1829 The retirement age for women is being gradually increased to 62 years of age, which should be reached by the end of 2014. Cf.: Whitehouse E. (2007), p. 151.

1830 *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 40.

$$D' = (D + D_1) \bullet F,$$

where:

D' – the amount of pension,

D – the value of the pension due at the time of reaching the retirement age,

$D_1$ – the value of the pension due for the period after reaching the statutory retirement age, calculated as:

$D_1 = \Sigma \text{ OMB} \bullet \text{ADH},$

F = 0.5% for each 30 days of professional activity after reaching the retirement age.

A similar rule is applied to calculating the value of pension in the case of early retirement, with `+´ in the above formula changed for `-´[1831]. The rules of indexation of pensions that had already been granted were changed by applying the mixed index, which was based in 50% on the inflation rate and in 50% on the nominal remuneration increase index[1832]. The system is managed by the Social Insurance Institution. There is no tax relief with reference to pension payment. However, pensioners do not pay social security contributions[1833].

**The 2nd pillar** is based on the rule of defined contribution and is a fully capital solution. The 2nd pillar contribution amounts to 9% of the remuneration[1834] and is transferred from the Social Insurance Institution to pension funds managed by private companies[1835]. Between 1 January 2005 and 30 June 2006, the 1st pillar participants could choose whether they wanted to join the 2nd pillar or not, except for those who had less than 10 years left to reach the retirement age. All those entering the labour market after 31

1831 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 285.
1832 Novysedlak V. (2006), p. 8.
1833 Whitehouse E. (2007), p. 151.
1834 *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 24.
1835 Most managing companies had foreign shareholders with the following capital groups being involved in the market: Gruppo Intesa, Allianz, Credit Suisse, Aegon end ING. Cf.: Draganovska A. (2005).

December 2004 are obliged to participate in the 2nd pillar[1836]. The funds are managed by managing companies or life insurance institutions. The 2nd pillar assets can be inherited. There are 6 companies managing the 2nd pillar pension funds[1837]. Each of them manages three pension funds with different levels of investment risk. The funds are allowed to invest in both domestic and foreign financial market instruments, with at least 30% of their assets being located in Slovakia[1838]. At first, the most risky funds enjoyed the greatest popularity, being chosen by 56% of participants, followed by sustainable funds with 37% of participants, and, finally, safe funds with merely 7% of the participants of the 2nd pillar[1839]. The 2nd pillar supervisory institution is the National Bank of Slovakia. Pensions are paid after reaching the retirement age, i.e. 62 years of age. The first pensions in this scheme should be paid as of 2015.

**The 3rd pillar** is based on voluntary pension plans organized by employers or individual plans managed by private companies. The minimum age required to participate in the 3rd pillar is 18[1840]. The minimal period of participation in the pension fund is 10 years, while the minimal age for the pension to be paid is 55 years. Tax relief applies to the 3rd pillar contributions[1841], with the possibility of deducting contributions of a value of up to SKK12,000 from the individual income tax base[1842]. Moreover, pension contributions paid by employers are regarded as tax deductible expenses[1843]. There were 5 companies on the market managing the 3rd pillar pension funds[1844]. The 3rd pillar supervisory institution is the National Bank of Slovakia.

1836 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 109.
1837 http://www.nbs.sk/INDEXA.HTM, accessed 15 January 2008.
1838 Tupy M. L. (2006).
1839 Draganovska A. (2005).
1840 Novysedlak V. (2006), p. 10.
1841 *Joint Report on Social Protection and Social Inclusion 2007. Social Inclusion, Pensions, Healthcare and Long Term Care* (2007), p. 377.
1842 *Reforms in Slovakia 2004 – 2005. Heso Project – Evaluation of Economic and Social Measures* (2005), p. 68.
1843 Novysedlak V. (2006), p. 11.
1844 http://www.nbs.sk/, accessed 15 January 2008.

### 2.23.4 Challenges and planned changes in the pension system in Slovakia

The main problem of the Slovak pension system is very early retirement[1845]. It seems that apart from government decisions to increase the statutory retirement age, the introduction of capital pillars could encourage longer periods of professional activity. Another problem is population ageing. It is stipulated that by the 2050s the number of people over 65 will have doubled[1846]. Another factor adversely affecting the stability of the system is a relatively high unemployment rate. It is stipulated that in 2010 the employment rate for those aged 55-64 will amount to 40.6%[1847]. Yet, this is not enough to ensure the stability of the system. Forecasts until 2030, in which the retirement age is 62, estimate the annual pension system deficit at 1.1% of the GDP. Within 30 years, the accumulated pension system deficit, connected also with the cost of transfer to the capital system, will stay at SKK50-70 billion[1848]. Even if the retirement age is increased to 65, the annual deficit will amount to 0.3% of the GDP[1849].

### 2.23.5 Summary

In the recent years, the Slovak pension system has changed dramatically, from the one-pillar pay-as-you-go type to the three-pillar system with two fully capital pillars. However, transition to the capital system involves high cost as regards the system change. The 1st pillar deficit can only be financed by the state budget subsidy and completed by the income from privatization of state assets. With the present dynamics of economic growth, it seems a burden which the Slovak economy can carry.

[1845] *Joint Report on Social Protection and Social Inclusion 2007. Social Inclusion, Pensions, Healthcare and Long Term Care* (2007), p. 378.

[1846] *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 4.

[1847] *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 21.

[1848] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 110.

[1849] *National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 25.

In comparison with other countries, a particularly valuable phenomenon is a high capital pension pillar share in the division of the accumulated pension contributions.

## 2.24 SLOVENIA

### 2.24.1 General information about the country

The Republic of Slovenia[1850] (*Republika Slovenija*) is a country in southern Europe on the Adriatic Sea, in the borderland between the Balkan Peninsula and the Eastern Alps, consisting of 210 communes (*občine).*

Slovenian is the official language. The main ethnic group were Slovenians forming 83.1% of the population. Serbs were the main minority, forming 2.0% of the population. The Catholics, consisting of 57.8%, were the main religious group, followed by Muslims at 2.4%. Over 38% of the population professed no religion.

Pursuant to the Constitution of 1991, the head of state is the President, and the government is led by the Prime Minister.

On 29 March 2004, Slovenia became a NATO member, and on 1 May 2004 it became a member of the EU. In 2007 Slovenia joined the Economic and Monetary Union replacing the Slovenian tolar with the euro[1851].

The current unit of currency is the euro.

The GDP *per capita* (PPP) estimated for 2007 amounted to US$27,300, and the GDP growth rate amounted to 5.6%. The public debt amounted to 25.7% of the GDP. External current account balance in 2007 showed a deficit of US$1.429 billion.

The unemployment rate amounted to 7.8%.

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[1850] *Wielka Encyklopedia PWN* (2004), v. 25, pp. 231 and further.

[1851] Slovenian tolars (SIT) were converted into the euro (EUR) at the exchange rate of SIT239,640 for EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 23 February 2008.

In July 2007 Slovenia was inhabited by 2,009,245 people[1852] of various age groups in a population: 0-14 years of age – 13.7%, 15-64 years of age – 70.3%, 65 years of age and over – 16.0%. The average life expectancy at birth was about 76.53 years, including men 84.72 years, and women 80.47 years.

### 2.24.2 Historic development of the pension system in Slovenia

The beginnings of the Slovenian pension system date back to the times of the Hapsburg monarchy, and are the continuation of the system based on the Bismarckian model of the Austro-Hungarian Empire. The first legal regulation concerning the accident insurance system comes from 1887[1853], and the health insurance system, including services for the aged, from 1888[1854]. In 1906 the first legal regulation concerning the pensions of white-collar workers[1855] was introduced. The Bismarck's model anticipated the existence of two separate systems for respective professional groups, and initially included civil servants, white-collar workers and miners. The first legal acts within the scope of pensions, health insurance, and accident insurance[1856] appeared in the Kingdom of the SCS, after the political changes in 1922. In 1927 the first legal regulation concerning unemployment was created, and in 1949 the first law dealing with the scope of family allowances[1857] was introduced. In the times of the Communist dominance and the federal state, all the pension matters were organized on the central level and concentrated in the central budget. Only after the death of Tito in 1982 was the pension

[1852] https://www.cia.gov/library/publications/the-world-factbook/geos/si.html, accessed 31March 2008.
[1853] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 288.
[1854] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 286.
[1855] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 284.
[1856] *Social Security Programs Throughout the World: Europe, 2006* (2006), pp. 292, 294 and 296.
[1857] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 298.

insurance separated from the central budget[1858]. Moreover, in 1983 in Slovenia only, through the Parliament decision of this Republic, the farmers and the self-employed[1859] were included in the general pension system. In 1989 pension insurance contribution amounted to 22.55%, out of which 3.45% was paid by the employer, and 19.10% was paid by the employee. In 1990 pensions adjustments and index of salaries, taken into account when calculating the pension[1860], were introduced. In 1991 Slovenia took over pension liabilities contracted by the authorities of Yugoslavia towards the citizens including military men[1861]. In 1991 pension insurance contribution amounted to 28.8%, and was paid in equal amounts by both the employer and the employee[1862]. Retirement age was 55 years for men and 50 years for women[1863]. Moreover, in 1991 the Pension and Disability Insurance Institute was set up (*Zavod za pokojninsko in invalidsko zavarovanje Slovenije*, ZPIZ)[1864]. Also, in 1991 the unemployment law[1865] was amended. The change of the social insurance law from 1992 contributed to the creation of the pension insurance in the pay-as-you-go formula, which was very characteristic for the 1st pillar of the pension system[1866]. It also introduced the possibility of functioning the voluntary and individual pension schemes[1867]. No tax incentives, however, were offered to make payments into these funds[1868]. The retirement age was 58 for men, and 53 for women[1869]. The minimal required contribution period to be qualified to full pension benefits was

1858 Roksandić M. (2006).
1859 *Republic of Slovenia National Strategy Report on Adequate and Sustainable Pensions 2005* (2005), p. 34.
1860 Stanovnik T., Stropnik N. (1999), p. 10.
1861 Following this year the pensions for soldiers were calculated according to general rules.
1862 Stanovnik T., Stropnik N. (1999), p. 12.
1863 Stanovnik T., Stropnik N. (1999), p. 5.
1864 http://www.zpiz.si/, accessed 18 January 2008.
1865 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 298.
1866 Geroldi G., Marano A. (2001), p. 5.
1867 Stropnik N., Stanovnik T., Rebolj M., Prevolnik-Rupel V. (2003), p. 54.
1868 Holzmann R. and Hinz R. et al. (2005), p. 151.
1869 Stanovnik T., Stropnik N. (1999), p. 5.

35 years for men, and 30 years for women. Early retirement pensions were possible for men over 55 and women over 50. This occurred only when the contribution period to obtain full pension benefits was met. The basic pension was calculated on the basis of the average net remuneration for the best 10 years of employment. The full pension amounted to 85% of the calculated basis. The minimum pension was for those with a full contribution period, whose net value could not be lower than 54% of the average net remuneration. The maximum pension, however, was for those with a full contribution period, whose net value could not be higher than 218% of the average net remuneration. At the same time, the lowest pension, irrespective of the net sum of the contributions paid and the period of insurance, could not be lower than 22% of the average net remuneration[1870]. In 1994 the pension insurance contribution amounted to 31.0%, and was still paid in equal amounts by both the employer and the employee[1871]. In 1996 the pension insurance contribution paid by the employers was reduced from 15.5% to 8.85% of the remuneration[1872], and the aggregate pension contribution from 1997 amounted to 24.35%[1873]. They argued that this change was necessary to improve the competitiveness of the Slovenian entrepreneurs[1874]. Since that time, however, the pension system without budgetary grants[1875] has not been able to reach liquidity. In 1999 a new pension law was introduced[1876]. The retirement age was ultimately estimated at 63 for men and 61 for women, and might be gradually increased[1877]. Early retirement

[1870] This pension amount was received mainly by the farmers. Cf.: Stanovnik T., Stropnik N. (1999), p. 10.

[1871] Stanovnik T., Stropnik N. (1999), p. 12.

[1872] Stropnik N., Stanovnik T., Rebolj M., Prevolnik-Rupel V. (2003), p. 66.

[1873] Stanovnik T., Stropnik N. (1999), p. 12.

[1874] Majcen B., Verbič M. (2007), p. 3.

[1875] Verbič M., Majcen B., van Nieuwkoop R. (2005), p. 6.

[1876] *Zakon o pokojninskem in invalidskem zavarovanju* – ZPIZ-1, Uradni list RS, št. 106/99 z dne 23.12.1999.

[1877] The retirement age for men was to increase by 6 months from each 1 January, starting in 2000, and the retirement age for women by 4 months from each 1 January, starting in 2000. The aim was to reach the target retirement age for men in 2009, and for women in 2023. Cf.: Verbič M. (2007), p. 8.

was possible both for men and women at 58. Early retirement did not result in pension reduction, on condition that the length of service of the retiring person was 40 years for men, and 38 years for women. The basis for pension calculation was increased from the average net remunerations for the best 10 years of employment, up to the best 18 years of employment[1878]. The pension was calculated as the sum of 35% of its basis, and 1.5% of its basis for each year of service. The pension payments were taxed in line with general principles. Simultaneously, the same legal regulation concerned the operations of public retirement funds, which in Slovenia constituted the element of the 2nd pension pillar, and which were governed by private companies, and supervised by the Securities Market Agency (*Agencija za trg vrednostnih papirjev*)[1879]. The decision whether it should be compulsory or voluntary to join the 2nd pension pillar[1880] was left to the competence of the social partners. The public funds, which were to be created and destined to public (open funds) or company (close funds) investments were supposed to, from 1 January 2000, replace the currently operating voluntary pension funds[1881]. Close funds could have been administered by a bank, or by the life insurance company, while the open funds by the private management companies[1882]. In the case of the public pension funds, the requirement of having at least 1,000 members and raising the funds of SIT50 million was determined. The management companies have been required to raise capital of up to SIT320 million of own funds, and to cover with retirement insurance at least 15,000 people[1883]. The contributions paid by the employees to the level of 24% of the 1st pillar pension contribution, or to the amount of SIT440,000 transferred to these funds were supposed to be covered by tax allowances within the scope of individual income tax, and exempted

[1878] *Republic of Slovenia National Strategy Report on Adequate and Sustainable Pensions 2005* (2005), p. 5.
[1879] http://www.zpiz.si/, accessed 18 January 2008.
[1880] Geroldi G., Marano A. (2001), p. 7.
[1881] Holzmann R. and Hinz R. et al. (2005), p. 152.
[1882] Geroldi G., Marano A. (2001), p. 8.
[1883] Stropnik N., Stanovnik T., Rebolj M., Prevolnik-Rupel V. (2003), p. 54.

from the payment of social security contributions. Life insurance companies could organize voluntary and individual pension funds which were supposed to constitute the 3rd pillar pension system[1884]. At the end of 1999, only 739 people[1885] participated in voluntary pension funds still operating on the basis of the regulations from 1992. From the beginning of 2000, a special company which had operated since 1996[1886] with 100% of Treasury shares, the Pension Management Fund (*Kapitalska družba*)[1887] was to manage three funds: 1) the capital mutual pension fund (*Kapitalski vzajemny pokojninsky sklad*, KVPS), which was the rightful successor of the voluntary pension fund introduced on the basis of regulations from 1992, 2) the mandatory supplementary pension insurance fund (*Sklada obveznega dodatnega pokojninskega zavarovanja Republike Slovenije*, SODPZ)[1888], introduced by law from 1999, and 3) the First Pension Fund (*Prvi pokojninski sklad Republike Slovenije*, PPS), created to absorb privatization certificates allocated for pension purposes. In 2000, a non-contributory state pension paid out from 2003 was introduced. This pension was payable to all those aged 68 who between 15 and 65 years of age lived in Slovenia for at least 30 years, and had no substantial income from other sources[1889]. Since 1 June 2000 the Insurance Supervision Agency has been operating (*Agencija za zavarovalni nadzor*)[1890]. In 2001, 753 thousand people participated in the 1st pension pillar, and 82 thousand in the public pension funds[1891]. In 2002, there were 16 public pension

[1884] Geroldi G., Marano A. (2001), p. 8.

[1885] Stropnik N., Stanovnik T., Rebolj M., Prevolnik-Rupel V. (2003), p. 54.

[1886] Was established on 24 October 1996 as the Capital Fund (*Kapitalski sklad*).

[1887] http://www.kapitalska-druzba.si/, accessed 18 January 2008.

[1888] The fund for certain professional groups who obliged themselves to participate in the 2nd pillar. The legislator established this fund to secure itself against a possible dysfunction of other, privately managed funds.

[1889] The age required to obtain this pension was successively lowered by 1 year, until the age of 65 was achieved in 2006. Cf.: *Republic of Slovenia National Strategy Report on Adequate and Sustainable Pensions 2005* (2005), p. 34.

[1890] http://www.a-zn.si/eng/client/default.asp?r=-1&n=254&p=content, accessed 20 January 2008.

[1891] Stropnik N., Stanovnik T., Rebolj M., Prevolnik-Rupel V. (2003), p. 55.

funds on the market, administered by private companies[1892]. In the same year the expenses of the public pension system were covered in 31.6% by budgetary funds[1893]. In 2003 health insurance and laws on family allowances[1894] were amended, and a special legal regulation on supplementary pensions for civil servants was introduced[1895]. On its basis an already closed mutual pension fund has been set up (*zaprt vzajemni pokojninski sklad*). On 31 March 2004, 372,258 people[1896] participated in the public pension funds, which constituted 49% of the basic pension system participants[1897]. In 2005 accident insurance law was amended[1898]. In the same year the employment rate of those aged 55-64 amounted to 30.7%, and the number of those professionally active in the voluntary supplementary pension schemes amounted to 56%[1899].

### 2.24.3 The present state of the pension system in Slovenia

The Slovenian pension system consists of three pillars[1900]: 1) the 1st pillar comprises a compulsory pension scheme, 2) the 2nd pillar comprises the public pension funds, and 3) the 3rd pillar consists of individual savings raised in the life insurance companies. Policemen and war veterans[1901] are covered by special pension rules. A person aged 65 who between 15 and 65 years of age lived in Slovenia for at least 30 years, and had no

1892 Stropnik N., Stanovnik T., Rebolj M., Prevolnik-Rupel V. (2003), p. 54.

1893 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 105.

1894 *Social Security Programs Throughout the World: Europe, 2006* (2006), pp. 294 and 298.

1895 *Zakon o kolektivnem dodatnem pokojninskem zavarovanju za javne uslužbence*, Uradni list RS, št. 126/2003.

1896 About 156,000 civil servants belonged to this group, for whom the 2nd pension pillar has been compulsory since 2003. Cf.: Roksandić M. (2006).

1897 *Republic of Slovenia National Strategy Report on Adequate and Sustainable Pensions 2005* (2005), p. 20.

1898 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 296.

1899 *Joint Report on Social Protection and Social Inclusion 2007. Social Inclusion, Pensions, Healthcare and Long Term Care* (2007), p. 368.

1900 Stropnik N., Stanovnik T., Rebolj M., Prevolnik-Rupel V. (2003), p. 54.

1901 *Republic of Slovenia National Strategy Report on Adequate and Sustainable Pensions 2005* (2005), p. 35.

income from other sources above a certain level[1902], received a special non-contributory state pension[1903]. The present state of the pension system in Slovenia is presented in **Scheme no. 24**.

**Scheme no. 24**

**The present state of the pension system in Slovenia**

| **1st pillar** | **2nd pillar** | **3rd pillar** |
|---|---|---|
| a compulsory pension scheme following the pay-as-you-go formula | the public pension funds | individual savings raised in the life insurance companies |
| administered by the National Pension and Disability Insurance Institute *Zavod za pokojninsko in invalidsko zavarovanje Slovenije*, ZPIZ | in relation to the management companies is supervised by the Securities Market Agency (*Agencija za trg vrednostnih papirjev*), and in relation to the insurance companies by the Insurance Supervision Agency (*Agencija za zavarovalni nadzor*) | supervised by the Insurance Supervision Agency *Agencija za zavarovalni nadzor* |

Source: Own elaboration.

**The 1st pillar** functions in the pay-as-you-go formula of the contributory system. The insurance pension contribution amounts to 24.35%, out of which the employer pays 8.85%, and the employee 15.50%. In the case of the self-employed, the insurance pension contribution amounts to 24.35% of their income. The resources shortcomings of the pension system are supplemented by the grants from the First Pension

[1902] In 2005 the level of such incomes was determined at SIT81,807.77 a month. Cf.: *Social Security Programs Throughout the World:* Europe, 2006 (2006), p. 293.

[1903] *Republic of Slovenia National Strategy Report on Adequate and Sustainable Pensions 2005* (2005), p. 34.

Fund administered by the Pension Management Fund[1904] and from the funds from VAT. In general, the budgetary grants comprise 1/3 of the pension expenses in the 1st pillar[1905]. There is no minimum or maximum level of income used in the calculation of a pension contribution[1906]. The retirement age is 62.5 years for men and 56 years for women[1907]. The condition to receive a full pension is to pay pension contributions for at least 20 years[1908]. Early retirement is possible both for men and women at 58[1909]. If a man documents at least a 40-year contributory period, and a woman at least a 38-year contributory period, it does not result in a reduction of the pension benefits. However, if the pension contribution period is shorter, their early retirement at 58 will result in a reduction of the pension benefits by 0.3% for each month of their early retirement. However, at the age of 59, the pension benefit is reduced by 0.25% for each month of early retirement. After the required statutory age is reached, the retiree is rewarded with a pension benefit bonus. This bonus, however, is of regressive growth[1910] which, depending on the retiree's age amounts to: 3.0% for the 1st year, 2.6% for the 2nd year, 2.2% for the 3rd year, 1.8% for the 4th year, and 1.5% for the 5th year[1911]. The average net remuneration for the

[1904] Currently, after the main phase of privatization has been finished, the resources allocated for the pension system are collected by the KAD (the Capital Corporation of Pension and Disability Insurance) from dividends obtained from shares of the partly privatized companies.

[1905] Roksandić M. (2006).

[1906] *Social Security Programs Throughout the World:* Europe, 2006 (2006), p. 292.

[1907] The target retirement age for men is 63 years in 2009, and 61 years for women in 2023. Cf.: *Republic of Slovenia National Strategy Report on Adequate and Sustainable Pensions 2005* (2005), pp. 26 and 27.

[1908] *Republic of Slovenia National Strategy Report on Adequate and Sustainable Pensions 2005* (2005), pp. 26 and 27.

[1909] Of course, in the case of women, the retirement age will be reached only in 2014, which means only after this year will women be entitled to early retirement.

[1910] For example: the pension will be increased by 3.6% for a male retiring at 64, but when he retires at 65, the pension will be increased by 6.0%, which means that the pension increase for the last year will amount to 2.4%.

[1911] http://www.zpiz.si/src/pravice/starostna08.htmlhttp://www.zpiz.si/src/pravice/starostna08.html, accessed 20 January 2008.

best eighteen years of employment[1912] is the basis for pension calculation. The salaries taken into account when calculating the basis are amended according to the increase in nominal remunerations. The basis calculated cannot be lower than 64% of the average net remuneration[1913]. There is also the maximum basis value for the pension calculation, which is four times larger than the minimum basis value[1914]. The pension amount is calculated by multiplying the basis value by 35% in the case of men, and by 40% in the case of women, and by adding to the amount calculated 1.5% of the basis value for each year of the pension contributions payment[1915]. The pensions are amended according to the index established each year, which cannot be lower than the price index increase or higher than the remuneration growth ratio[1916]. The 1st pillar is administered by the National Pension and Disability Insurance Institute.

**The 2nd pillar** consists of the public pension funds. These may be open funds or close funds. The open funds are available to the general public, while the close funds are limited to the employees of a company. The close-ended funds are administered by the banks or the life insurance companies, while the open funds are administered by the privately-owned management companies[1917]. The participation in funds is either voluntary or compulsory, depending on the decision made by the social partners. The 2nd pillar, after the introduction of such clauses to the collective agreements between the labour unions and employers[1918], becomes compulsory. The self-employed can also participate in the open funds. The 2nd pillar contribution, fully paid by the employee, amounts up to 24% of the 1st pillar pension insurance contribution amount, and is

1912 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 293.

1913 In 2005, the minimum value of the pension calculation base amounted to SIT104,495.45 a month. Cf.: *Social Security Programs Throughout the World:* Europe, 2006 (2006), p. 293.

1914 *Republic of Slovenia National Strategy Report on Adequate and Sustainable Pensions 2005* (2005), p. 19.

1915 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 293.

1916 Verbič M., Majcen B., van Nieuwkoop R. (2005), p. 8.

1917 Geroldi G., Marano A. (2001), p. 8.

1918 Roksandić M. (2006).

covered by tax allowances[1919]. The tax allowance amount, however, cannot exceed the amount of €199.17 a month[1920]. The supervision over the 2nd pillar, in relation to the management companies, is administered by the Securities Market Agency, and in relation to the insurance companies by the Insurance Supervision Agency.

**The 3rd pillar** consists of individual pension funds administered by the life insurance companies[1921]. The contributions transferred to the 3rd pillar are subject to tax allowances up to 3% of taxable income[1922]. Moreover, the pension benefits paid out from the 3rd pillar are not subject to individual income tax[1923]. The supervision over the 3rd pillar is administered by the Insurance Supervision Agency.

### 2.24.4 Challenges and planned changes in the pension system in Slovenia

The biggest challenge the pension system in Slovenia has to face is the demographic situation. The number of those aged 65 in 2050 is predicted to amount to 32%[1924]. Pension system grants will result in big burdens for the public finance which, according to predictions, in 2020 will reach 2.4% of the GDP, and in 2050 as much as 10% of the GDP[1925]. The Slovenian government plans from 2006 related to pension system matters indicate the following future tasks[1926]:

[1919] 24% out of 24.35% is about 5.84% of the gross remuneration.

[1920] http://www.prva.net/en/pensions_in_slovenia.asp?FolderId=244, accessed 21 January 2008.

[1921] Geroldi G., Marano A. (2001), p. 8.

[1922] Stropnik N., Stanovnik T., Rebolj M., Prevolnik-Rupel V. (2003), p. 56.

[1923] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 106.

[1924] Holzmann R., MacKellar L., Rutkowski M. (2003), p. 43.

[1925] *Republic of Slovenia National Strategy Report on Adequate and Sustainable Pensions 2005* (2005), p. 15.

[1926] *National Report on Strategies for Social Protection and Social Inclusion 2006-2008* (2006), pp. 54 and 55.

- the promotion of economic growth, the decrease in public debt and the achievement of budget surpluses in the long-term perspective,
- the promotion and the stable increase in the employment rate, and the extension of the working life,
- permanent increase in the number of pension-insured people in the whole population,
- individual responsibility increase for their social matters,
- the increase in the number of supplementary pension scheme participants.

### 2.24.5 Summary

The pension system in Slovenia was introduced after the geopolitical changes in 1992, and took the Bismarck's path from the West of Europe as its model. An attempt to implement a system reform from 1999 was only partly successful. There are still fewer participants in the 2nd pillar than in the 1st pension pillar. Without budgetary grants expenses amounting to 1/3, the currently functioning solution cannot be efficient. In accordance with parametric elements, it should be noted that, despite the changes initiated in 2000 in Slovenia, the retirement age there is still very low compared to international levels, which definitely makes the pension system less effective. The increase in the employment rate of those aged 55-64 seems to be very important, which was noticed by the World Bank in the latest recommendations[1927].

In comparison with other countries, it is interesting that in Slovenia the income from the privatization of the property of the State Treasury have been used to finance the pension system.

[1927] *Trade unions oppose major reform of pension system* (2007).

## 2.25 SPAIN

### 2.25.1 General information about the country

The Kingdom of Spain[1928] (*Reino de Espańa*) is a country in south-western Europe on the Mediterranean Sea covering about 85% of the Iberian Peninsula, Balearic Islands, Canary Islands and two autonomous cities – Ceuta and Melilla that border Morocco. The country comprises 17 autonomous communities (*Comunidades Autónomas*) and 2 autonomous cities (*Ciudad Autónoma*).

The official language of the whole country is Spanish (Castilian). In some regions mother tongues also have the status of official languages: Basque in parts of the Basque Country and Navarre, Catalan in Catalonia, Valencia and the Balearic Islands, and Galician in Galicia. The largest ethnic group were the Castilian Spanish (74% of the population). The Catalonians constituted 17% of the population, Galicians – 7%, and Basques – 2%. The largest religious group were the Catholics – 94% of the population.

According to the Constitution of 1978, the head of the state is the King, and the government is led by the President of the government (*Presidente del Gobierno del Espańa*)[1929].

In 1982 Spain became a member of the NATO, and in 1986 it joined the European Community. In 1999 Spain joined the Economic and Monetary Union and replaced the Spanish peseta with the euro[1930].

The currency in Spain is the euro.

The GDP *per capita* (PPP) was estimated in 2007 at US$33,700, with a growth rate of 3.8%, and the public debt was 35.7% of the GDP; the current national balance at the end of 2007 showed the deficit of US$126.3 billion.

[1928] *Wielka Encyklopedia PWN* (2002), v. 11, pp. 346 and further.

[1929] An equivalent of the Prime Minister.

[1930] Spanish pesetas (ESP) were converted into the euro (EUR) at the exchange rate of ESP166,386 per EUR1. Cf.: http://www.ecb.int/bc/intro/html/index.en.html#fix, accessed 31 March 2008.

The unemployment rate was 7.6%.

In July 2007 the population of Spain was 40,448,191 people[1931] with the following age groups: 0-14 years of age – 14.4%, 15-64 years of age – 67.8%, 65 years of age and older – 17.8%. The overall life expectancy at birth was 79.78 years, 76.46 years for men, and 83.32 years for women.

### 2.25.2 Historic development of the pension system in Spain

In 1900 the first legal regulation on accident insurance covering also people in the old age was introduced[1932]. In **1919** the first social security programme related to the risk of old age[1933] was prepared in Spain, which also covered the benefits in case of unemployment[1934]. In 1929 the first law on maternity benefits appeared[1935]. During the Civil War in Spain in 1936-39, all the regulations on social matters were abolished. In 1938 the law on family benefits was introduced[1936]. In 1939 an obligatory pension and disability insurance for people with low income was introduced, and in 1942 the health insurance. After the establishment of Franco's dictatorship, the national social policy was at first marginalised, and the health care functions were fulfilled in the form of charity activity of the Catholic Church[1937]. However, in 1963, at the end of Franco's epoch, a legal act on the Bases of Social Security was passed (*Ley de Bases de la Seguridad Social*) to become valid in 1967. At that time the amount of a pension contribution was determined at 14% of the remuneration, 10% of which was paid by the employer, and 4% by the employee[1938]. In 1969 the rules of the functioning of a special regime for home workers were established (*Régimen Especial de Empleados de Hogar*, REEH), and in 1970

1931 https://www.cia.gov/library/publications/the-world-factbook/geos/sp.html, accessed 31March 2008.

1932 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 304.

1933 Kawiński M. (2004b), p. 149.

1934 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 306.

1935 *Social Security Programs Throughout the World: Europe, 2006* (2006), p.303.

1936 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 307.

1937 Kawiński M. (2004b), p. 149.

1938 Chuliá E. (2007), p. 515.

the rules concerning the self-employed (*Régimen Especial de Trabajadores Autónomos*, RETA) and seamen (*Régimen Especial de Trabajadores del Mar*, RETM). In 1972 the rules governing the functioning of the pension regime for farmers were formulated (*Régimen Especial Agrario*, REA), and in 1973 – for coal miners (*Régimen Especial de la Mineria del Carbon*, REMC)[1939]. The final reform on social matters was conducted in 1974 (*Ley General de la Seguridad Social).* A record on social security was added to the Constitution of 1978. In the same year, the National Institute of Social Services (*Instituto Nacional de Servicios Sociales*, INSS)[1940] came into being, and became responsible for the area connected with pensions and disability benefits. Pensions were available to those who turned 65, with the minimum period of participation in the system set at 10 years. The pension calculation base amounted to a half of the average remuneration in the best 2 years in the last 7 contribution years, increased by 2% of the calculation base for each contribution year between the 11$^{th}$ and 35$^{th}$ contribution year[1941]. Pension contribution equalled 34.3% of the gross remuneration, 29.5% of which was paid by the employer, and 4.8% by the employee. Another reform of 1985 extended the minimum contribution period entitling to pension from 10 to 15 years and prolonged the period used for pension calculation from 2 to 8 years[1942]. Also in 1985 the law on unemployment benefits was amended[1943]. In 1987 the Royal Decree on pension funds was issued, which enabled the establishment of a complimentary capital pension system[1944]. The maximum yearly contribution within this system, subject to a tax reduction of 2/3, was then determined at the level of 15% of the net remuneration, but not more ESP750,000 per household[1945]. In 1990 the number of participants in the

[1939] Comós Victoria I. (2000).
[1940] http://www.seg-social.es/imserso/imserso/i0_quiensomop.html, accessed 2 November 2007.
[1941] Kawiński M. (2004b), p. 149.
[1942] Chuliá E. (2007), p. 523.
[1943] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 306.
[1944] Kawiński M. (2004b), p. 153.
[1945] Chuliá E. (2007), p. 523.

private pension schemes reached about 600,000, i.e. about 5% of the total number of employed people[1946]. At that time the Association of Collective Investment Institutions and Pension Funds (*Asociación de Instituciones de Inversión Colectiva y Fondos de Pensiones*, INVERCO)[1947] was set up. In 1991 a supply element of the base system began to function[1948]. In 1994 new regulations on pension, accident and health insurance were introduced[1949]. In 1995 the so-called Pact of Toledo (*Pacto de Toledo*) was signed, and prepared the ground for further reforms. In 1997 the Royal Decree on social security consolidation and rationalisation was issued. The Decree introduced the division of sources of finances on social benefits into contributory and tax-related. On its basis also a reserve pension fund was established, and the process of equalising the maximum contribution base for various professional groups began, as well the agreed period for pension calculation was increased from 8 to 15 years. Also, the possibility of earlier retirement for people employed before 1 January 1967 was introduced, the mode of pension indexation of pensions was changed and supplementary allowances for people continuing to work after turning 65 were granted[1950]. In 1997 new rules governing the functioning of the general regime were implemented, including the amount of pension contribution set at 28.3% of the gross remuneration, 23.6% of which was paid by the employer, and the remaining 4.7% by the employee[1951]. In 1999 the number of participants in the private pension schemes reached about 4 million, i.e. about 30% of the total number of the employed[1952], and the number of pensioners receiving their pensions from the insurance in the base system reached 7.6 million people[1953]. In 2000 the number of employees paying contributions within the base system was estimated

[1946] Boldrin M., Jiménez-Martin P., Peracchi F. (2004), p. 499.
[1947] Chuliá E. (2007), p. 530.
[1948] Chuliá E. (2007), p. 517.
[1949] Kawiński M. (2004b), p. 152.
[1950] Kawiński M. (2004b), pp. 166 and 167.
[1951] Boldrin M., Jiménez-Martin P., Peracchi F. (2004), p. 507.
[1952] Boldrin M., Jiménez-Martin P., Peracchi F. (2004), p. 499.
[1953] Boldrin M., Jiménez-Martin P., Peracchi F. (2004), p. 500.

at 14.9 million people, 70% of whom were the participants of the base regime, and the rest of special regimes[1954]. Pension benefits paid out in 2001 constituted 9.8% of the GDP[1955]. In 2001 the law on maternity benefits was amended[1956]. Another parametric reform of 2001, which became valid in 2002[1957], concerned putting an end to the division of the insurance and supply systems, financing the reserve pension fund, lowering social security contributions paid for employees over 60 years old by 50%, offering pensions exceeding 100% of the remuneration base for working people older than 65 years, and softening the rules of earlier retirement[1958]. In 2002 pension contribution was 28.3%, 4.7% of which was paid by the employee[1959]. From 2002 an income limit subject to the payment of pension contributions for all professional categories was defined[1960]. In 2003 the general regimes showed the surplus of 1.08% of the GDP. Among the special regimes there was also a surplus among the self-employed (0.25% of the GDP), whereas the other regimes showed deficits: farmer regime (1.12% of the GDP), seaman regime (0.15% of the GDP), miner regime (0.13% of the GDP) and home worker regime (0.13% of the GDP)[1961]. In 2003 about 490 thousand people received a supply pension[1962], and the number of participants in the capital pension schemes was about 7.3 million people, over 6.4 million of whom had individual schemes[1963]. The Royal Decree of 2 July 2004 established the Institute of the Elderly and Social Services (*Instituto de Mayores y Servicios Sociales*, IMSERSO), which among all dealt with the service of supply

[1954] Boldrin M., Jiménez-Martin P., Peracchi F. (2004), pp. 499 and 500.
[1955] Kawiński M. (2004b), p. 153.
[1956] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 303.
[1957] Chuliá E. (2007), p. 525.
[1958] Kawiński M. (2004b), p. 167.
[1959] Holzmann R., MacKellar L., Rutkowski M. (2003), p. 43.
[1960] Chuliá E. (2007), p. 517.
[1961] Vidal-Meliá C., Dominguez-Fabián I. (2006), p. 612.
[1962] Chuliá E. (2007), p. 533.
[1963] *Report on the Spanish Strategy for the Future of the Pension System* (2005), p. 17.

pension benefits[1964]. In July 2004 the Declaration of Social Dialogue (*Declaración para el Diálogo social 2004*) came into being and revised the Pact of Toledo[1965]. In 2004 the number of participants in company pension schemes significantly increased due to the fact that over 500 thousand workers of the public sector decided to join those schemes[1966]. In January 2005, 497,421 people received supply pensions[1967]. In July 2005 the pension reserve fund had the resources of over €26.6 billion[1968]. In 2005 the law on family benefits was amended[1969]. In October 2006 the number of pensions paid reached 8,210,445, and from 1 November 2006 the average pension amounted to €727.70 a month[1970]. From 1 January 2007 banks could offer individual pension plans (*planes individuales de ahorro sistemático*, PIAS). Contribution paid to the PIAS could not exceed €8,000 a year[1971]. In July 2007 the Royal Decree on special treatment of freelance professions within social security was published (*del Estatuto del trabajo autónomo*)[1972].

### 2.25.3 The present state of the pension system in Spain

Presently the pension system in Spain consists of three pillars[1973]: 1) the obligatory repartition base system, 2) the complimentary voluntary company capital system and 3) the voluntary individual pension schemes. The present state of the pension system in Spain is presented in **Scheme no. 25**.

[1964] http://www.seg-social.es/imserso/imserso/i0_quiensomop.html, accessed 2 November 2007.
[1965] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 40.
[1966] *Report on the Spanish Strategy for the Future of the Pension System* (2005), p. 17.
[1967] *Report on the Spanish Strategy for the Future of the Pension System* (2005), p. 8.
[1968] *Report on the Spanish Strategy for the Future of the Pension System* (2005), p. 31.
[1969] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 307.
[1970] Blinch J. (2006b).
[1971] *Planes individuales de ahorro sistemático* (2007).
[1972] http://www.gabilop.com/weblaboral/autonomos/textonormativa.htm, accessed 3 November 2007.
[1973] Chuliá E. (2007), p. 518.

**Scheme no. 25**

**The present state of the pension system in Spain**

<table>
<tr><th colspan="8">1st pillar</th><th>2nd pillar</th><th>3rd pillar</th></tr>
<tr><td colspan="8">the obligatory repartition base system</td><td rowspan="4">the complimentary voluntary company capital system</td><td rowspan="4">the voluntary individual pension schemes</td></tr>
<tr><td colspan="7">an insurance element</td><td rowspan="3">a supply element</td></tr>
<tr><td>a general regime<br>*Régimen General de la Seguridad Social*, RGSS</td><td colspan="6">special regimes<br>*Regimenes Especiales de la Seguridad Social*, RESS</td></tr>
<tr><td>all the hired workers, excluding those covered by the special regimes</td><td>the self-employed *Régimen Especial de Trabajadores Autónomos*, RETA</td><td>farmers *Régimen Especial Agrario*, REA</td><td>home workers<br>*Régimen Especial de Empleados de Hogar*, REEH</td><td>seamen<br>*Régimen Especial de Trabajadores del Mar*, RETM</td><td>miners *Régimen Especial de la Mineria del Carbon*, REMC</td><td>civil servants and uniformed officers*<br>*Régimen Clases Pasivas*, RCP</td></tr>
</table>

* Currently wound-down.
Source: Own elaboration.

**The base system** contains an insurance element for contribution payers, and a supply element for people over 64 years old, who are not entitled to pension benefits paid from the insurance.

**The insurance element** acts as a general regime (*Régimen General de la Seguridad Social*, RGSS) and special regimes (*Regimenes Especiales de la Seguridad Social*, RESS). The general regime concerns all the hired workers, excluding those covered by the special regimes. The special regimes concern five professional categories[1974]: the self-employed (*Régimen Especial de Trabajadores Autónomos*, RETA), farmers (*Régimen Especial Agrario*, REA), home workers (*Régimen Especial de Empleados de Hogar*, REEH), seamen (*Régimen Especial de Trabajadores del Mar*, RETM) and miners (*Régimen Especial de la Mineria del Carbon*, REMC). Moreover, there is a separate, diminishing regime for civil servants and uniformed officers (*Régimen Clases Pasivas*, RCP), however, it does not cover newly employed people. The general regime is a repartition system operating within the pay-as-you-go formula. The contribution paid in the general regime amounts 28.3%, 23.6% of which is paid by the employer, and the remaining 4.7% by the employee. The contribution is paid from the earnings exceeding €635.70 a month[1975]. Pension contribution is collected to the level of 19.1% of the average remuneration[1976], i.e. €2,897.70 a month[1977]. People entitled to a full pension benefit are those who turned 65 and completed the contribution period of 35 years. However, in order to receive any pension benefits (lower than the full pension) it is necessary to complete the contribution period of at least 15 years, where at least 2 contribution years were in the period of the last 15 years before the retirement. Earlier retirement is available to 60-year-old people and older who lost their jobs through no fault of theirs and whose contribution period is sufficient. The minimum contribution period allowing for earlier retirement is 30 years. In the case of earlier retirement the pension calculation base is lowered by 6-8%, depending on the number of contribution years[1978]. Earlier retirement benefit amounting to the full pension amount is for people working in hard working conditions[1979]. A special earlier retirement is available to people aged 64, in the case when another person is employed for their position. It is also possible to retire any time later than the specified retirement age. In such a case, the pension is increased by 2% of the calculation base for each year above 65 years

[1974] Boldrin M., Jiménez-Martin P., Peracchi F. (2004), p. 506.
[1975] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 300.
[1976] Whitehouse E. (2007), p. 110.
[1977] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 300.
[1978] Kawiński M. (2004b), p. 159.
[1979] Kawiński M. (2004b), p. 157.

of age, on condition that the pensioner paid contributions for at least 35 years. In the insurance system, the pension amount depends on the average remuneration received in the last 15 years of work. Moreover, the remunerations from the first 156 contribution months are indexed with the consumer price index. With 15 years of contributions, the pension equals 50% of the calculation base. For further 10 years of contributions, the pensioner is entitled to additional 3% of the calculation base per year, and for the next 10 years, additional 2% of the calculation base per year. This means the possibility of reaching 100% of the calculation base with the contributions paid for 35 years. The system allows for the functioning of a maximum pension, which may not be higher than about 4.3 times more than the minimum remuneration (*salario minimo interprofesional*, SMI) and about 1.6 times higher than the average remunerations received in industry and services. Minimum pension, on the other hand, may not be lower than 100% of the SMI[1980]. In 2006 it equalled €466.98 a month[1981]. Besides the monthly pension benefit, each pensioner was entitled to receive twice a year supplementary allowances in the amount of a monthly pension[1982].

Within **the supply element**, pension is granted to a person who turned 65 and is not entitled to the pension from the insurance[1983]. Such a pension is financed from general taxes and paid 14 times a year. Pension benefits are not subject to any contributions on social security. The pensions are taxed according to general principles[1984]. Pension indexation is carried out once a year on the basis of the consumer price index[1985].

Within the special regimes in the RETA, a pension contribution equals 28.3% of the net income[1986].

[1980] Boldrin M., Jiménez-Martin P., Peracchi F. (2004), p. 510.
[1981] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 301.
[1982] Kawiński M. (2004b), p. 159.
[1983] In 2002 it was €258.68. Cf.: Kawiński M. (2004b), p. 158.
[1984] Whitehouse E. (2007), p. 110.
[1985] Vidal-Meliá C., Dominguez-Fabián I. (2006), p. 613.
[1986] http://www.seg-social.es/inicio/?MIval=cw_usr_view_Folder&LANG=6&ID=36537, accessed 3 November 2007.

In the REA contributions are at 19.75% of the income, in the case of landowner, and in the case of farm workers the contribution paid by the employer amounts to 11.5% of their monthly remuneration. Furthermore, the employer is obliged to pay 15.5% of the daily remuneration. Within the REEH contribution amounts to 22%, 18.3% of which is paid by the employer, and 3.7% by the employee[1987]. Almost 55% of the pensions paid within this regime are at the level of the minimum pension[1988].

The RPC system distinguishes five categories: 1) graduates of school of higher education (*doctor, licenciado, arquitecto*), 2) graduates of higher vocational schools (*ingeniero técnico, diplomado*), 3) graduates of upper-secondary schools (*bachiller*), 4) graduates of lower-secondary schools (*graduado escolar*), and 5) people with lower degrees (*certificad*)[1989]. Every year, the budget law determines a theoretical remuneration for each of those categories, which constitutes the basis of the social security. Pension contribution constitutes the sum of three elements determined annually in the budget law: a) the rights of the civil servants (*derechos pasivos*), b) a general monthly payment (*cuota mensual de mutualidades*), and c) state contribution in kind (*aportacion del estado*), and falls between 11.75% and 15.5% depending on the administrative sector.

**The complimentary company capital system** provides two forms: a) company pension schemes and b) association pension schemes. The association pension schemes may be run by associations, trade unions and other public bodies[1990]. One entity may open only one pension scheme. Three types of schemes are available: a) schemes with a defined contribution, b) with a defined benefit, c) mixed. The solutions with defined benefits require the opinion of an actuary on their future solvency. The contributions within the company and association pension schemes are paid by the founder of the scheme, however, it is possible that the

[1987] Chuliá E. (2007), p. 519.

[1988] *Report on the Spanish Strategy for the Future of the Pension System* (2005), p. 7.

[1989] Boldrin M., Jiménez-Martin P., Peracchi F. (2004), p. 512.

[1990] http://fondosweb.tsai.es/fondosweb/inverco/home00.html, accessed 4 November 2007.

participant compliments them himself. A yearly contribution may not exceed the limit defined by law[1991]. Contributions are transferred to pension funds managed by external companies, such as specialized financial institutions or life insurance institutions. The pensions may take the form of lifelong, periodical and single payouts. They are paid the moment a person is entitled to a base pension, however, not sooner than before he or she is 60 years old. In special situations, such as the lost work capacity, long-term unemployment, the death of a member of a pension scheme or the death of the spouse, thanks to the established law on widow or orphan pensions it is possible to withdraw the resources accumulated in the fund earlier. Participants of pension schemes may take advantage of tax deductions. Capital gains within the pension scheme are income tax free. The amount of the pension contribution paid by the employer may be classified as deductible costs. In 2007 the number of pension funds present in the market was 1,351, and the number of company pension schemes was 108[1992], and 250 of them were associated with the INVERCO[1993].

**Individual pension schemes** constitute the 3rd pillar of the pension system and are realised in the form of personal payments to life insurance institutions, banks or investment funds. In 2007 there were 1,154 pension schemes for individuals on the Spanish market[1994].

### 2.25.4 Challenges and planned changes in the pension system in Spain

The most important challenge that the pension system in Spain is facing is the demographic situation, which already after the year 2015

[1991] In 2000 this limit was typically set at €7.212, and in the case of people over the age of 52 – €15.025.
[1992] http://www.dgsfp.mineco.es/, accessed 5 November 2007.
[1993] http://fondosweb.tsai.es/fondosweb/inverco/home00.html, accessed 4 November 2007.
[1994] http://www.dgsfp.mineco.es/sector/Planespensionep.asp, accessed 5 November 2007.

may decide on the stability of the pension system[1995]. The illustration of this situation is the change in the number of participants over 65 years old from the level of 7.3% in 1950, through 17% in 2000, to the anticipated 34% in 2050[1996]. It is presumed that in 2050 pensioners will constitute 67% in relation to the number of employed people[1997]. Another problem is also the difference in pension amounts for men and women. The latter usually receive their pensions from the supply system or widow's pension. As a result, 30% of pensioners receive the minimum pensions[1998]. A serious problem in the Spanish reality may also be the fact that trade unions oppose any attempts of introducing changes in the adopted pension solutions, which often ends in strikes[1999]. This way of extorting further social benefits may only be financed from general taxes, which may lead to future fiscal overload. Already in 2005 over €1.2 million was transferred from the budget to finance pension benefits[2000]. This may be particularly dangerous with the anticipated decrease in the competitiveness of the Spanish economy.

### 2.25.5 Summary

The present pension system in Spain fulfils its function of supplying older people with sufficient resources. The surplus in the pension system[2001] even allows for allocating resources in the form of securities to the pension reserve fund[2002]. However, the demographic situation may pose a serious threat to the system stability as soon as in 2015. According to various forecasts, the resources in the pension reserve fund should be

[1995] Kawiński M. (2004b), p. 163.
[1996] Chuliá E. (2007), p. 499.
[1997] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 40.
[1998] Vidal-Meliá C., Dominguez-Fabián I. (2006), p. 615.
[1999] Including the general strike of 1988.
[2000] *Report on the Spanish Strategy for the Future of the Pension System* (2005), p. 5.
[2001] Government estimates that the value of the reserves at the end of 2007 will be at the level of €40 billion. Cf.: Blinch J. (2006b).
[2002] *Report on the Spanish Strategy for the Future of the Pension System* (2005), p. 31.

sufficient until 2020[2003] or 2036[2004]. It seems that the only way to prevent system insolvency is to reach for capital solutions. So far, however, in Spain there have been no attempts aiming at the introduction of system changes concerned with the adopted pension solutions. The prepared and theoretically reviewed proposal on the transition to the NDC[2005] system presented in 2006 did not go beyond the phase of scientific projection.

An interesting element noticed in international comparisons and characteristic of the Spanish pension system is the existence of a special pension scheme for home workers.

## 2.26 SWEDEN

### 2.26.1 General information about the country

The Kingdom of Sweden[2006] (*Konungaritet Sverige*) is a country located in northern Europe, in the eastern and southern parts of the Scandinavian Peninsula. It comprises 21 counties (*län*).

The official language is Swedish. The largest ethnic group were the Swedes (90% of the population). The largest minorities were the Finns – 2.4% and Sami – 1.9%. The largest religious group were the Lutherans (87% of the population), and the rest (13%) constituted mainly the Catholics, the Orthodox, and the Baptists. Pursuant to the Constitution of the country (adopted in 1975), the head of the state is the King and the government is led by the Prime Minister.

In 1995 Sweden became a member of the European Union.

The monetary unit of Sweden is the Swedish crown (SEK[2007], *Svensk krona*).

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2003 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 42.

2004 Blinch J. (2006a).

2005 Cf.: Vidal-Meliá C., Dominguez-Fabián I. (2006), pp. 611-637.

2006 *Wielka Encyklopedia PWN* (2005), v. 26, pp. 510 and further.

2007 According to the ISO 4217 standard. On 31 December 2007, EUR1 was worth SEK9,4415. Cf.: http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-sek.en.html, accessed 23 February 2008.

The GDP *per capita* (PPP) was estimated in 2007 at US$36,900, with a growth rate of 3.4%, and the public debt was 41.9% of the GDP; the current national balance at the end of 2007 showed the surplus of US$30.19 billion.

The unemployment rate was 4.5%.

In July 2007 the population of Sweden was 9,031,088[2008], with the following age groups: 0-14 years old – 16.4%, 15-64 years old– 65.7%, 65 years old and older – 17.9%. The overall life expectancy at birth was 80.63 years: 78.39 for men and 83.00 years for women.

### 2.26.2 Historic development of the pension system in Sweden

The beginnings of the Swedish pension system date back to the 19th c. As early as 1847 the communes were burdened with the duty of taking care of the needy[2009]. In 1891 state budget funds were directed at subsidizing workers' industrial accident insurance, and in 1901 an all-national industrial accident insurance system was introduced[2010]. In **1913**, in the first law concerning pension, the retirement age was set at 67[2011]. This general law, which took effect at the beginning of 1914, encompassed all the workers aged 16 to 66[2012]. The system consisted of two parts: 1) non-contributory, dependent only on the age, means-tested (*premiereservsystemet*, PRS), and 2) contributory, dependent on an individual's contribution to the system (*avgiftspension*, AP)[2013]. The network of the local unemployment insurance funds, supported by the state budget, was also instituted in 1914. It was managed by the trade unions[2014]. Public sector workers, whose retirement

[2008] https://www.cia.gov/library/publications/the-world-factbook/geos/sw.html, accessed 31March 2008.
[2009] *Wielka Encyklopedia PWN* (2005), v. 26, p. 521.
[2010] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 311.
[2011] Wadensjö E. (2002), p. 59.
[2012] Żukowski M. (2006), p. 93.
[2013] Anderson K. M., Immergut E. M. (2007), p. 360.
[2014] Wiśniewski J. (2005), pp. 49-50.

age was also set at 67[2015], were covered by a separate pension plan. In 1917 the first company-based retirement plan was introduced, which rested upon social partnership agreements. In the same year the Swedish Pension Fund of the Workers of the Private Sector (*Sveriges Privatanställdas Pensionskassa*, SPP)[2016] was established, and in 1922 the Swedish Pension Fund of Municipal Workers (*Sveriges Kommunalanställdas Pensionskassa*, SKP)[2017] was set up. In 1929 the SPP was renamed to the Swedish Personal Pension Fund (*Svenska Personal – Pensionskassan*, SPP)[2018]. In 1931 the first health insurance was introduced, followed by the first unemployment insurance[2019] of 1934. In 1935 the PRS was replaced by the residential pension (*folkpension*, FP)[2020]. In the 1930s pension indexation was introduced, which took into account territorial differences in the cost of living[2021], where the average pension at that time constituted about 10% of the average remuneration[2022]. In 1947 the first law on family allowances was passed[2023]. At the beginning of 1948, pension contributions were nullified by the law of 1946[2024]. Only the non-contribution part, known as residential pension[2025], remained. The average pension under that system constituted about 35% of the average remuneration[2026]. In 1956 the SKP was renamed into the Communal Pension Association (*Kommunernas Pensionsanstalt*, KPA)[2027]. The law of 1959 introduced an additional salary-based pension plan, defined as general subsidiary pension plan (*Allmän Tilläggspension*, ATP). Thus, the pension plan was comprised of two components 1) residential pension, and 2) salary-based pension plan (ATP),

2015 Żukowski M. (2006), p. 93.
2016 http://www.alecta.se/templates/Sida____1780.aspx, accessed 30 January 2008.
2017 http://www.kpa.se/mallar/Sida____1510.aspx, accessed 30 January 2008.
2018 http://www.alecta.se/templates/Sida____1780.aspx, accessed 30 January 2008.
2019 *Social Security Programs Throughout the World: Europe, 2006* (2006), pp. 311 and 314.
2020 Anderson K. M., Immergut E. M. (2007), p. 360.
2021 Wiśniewski J. (2005), p. 50.
2022 Palmer E. (2006), p. 33.
2023 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 315.
2024 Palme J. (2005), p. 146.
2025 Szumlicz T. (2004), p. 285.
2026 Żukowski M. (2006), p. 93.
2027 http://www.kpa.se/mallar/Sida____1510.aspx, accessed 30 January 2008.

which together amounted to the replacement rate of 65%[2028]. The residential pension was the same for all residents of the same marital status during the period of residency in Sweden. Within the ATP there existed a possibility of early retirement at the age of just 60, as long as it was justified by a lawful pension reduction[2029]. The reduction was at the level of 0.5% for every month of early retirement[2030]. It was also possible to retire after reaching the age of 65. Then the pension calculated was increased by 0.7% for every month of later retirement until the age of 70[2031]. In 1960 a notion of base amount (*basbelopp*) was introduced, which at that time was at the level of SEK4,200[2032]. Under the ATP, the so-called buffering funds were created, which were meant to eliminate the consequences of changes in the amounts of incoming and outcoming funds in the system[2033]. Initially seven National Pension Funds were established (*AP – funds*)[2034]. Also in 1960 the first subsidiary company-based pension plans were introduced, known as flexi-pension plans (*Flexiblare pensioneringssystem*, FP)[2035], which allowed for the retirement between the ages of 60 and 70. The pension for civil servants was calculated according to different rules. The pension was at the level of 65% of their last salary prior to retirement and the retirement age was 65. Under that system there was no possibility of early retirement[2036]. For military personnel the retirement age was 55. In 1961 the National Insurance Company (*Riksförsäkringsverket*, RFV) was set up. In later years it dealt with collecting social insurance contributions. In 1962 a comprehensive legal regulation came into effect covering all kinds of social insurance (*Lag om allmän försäkring*)[2037]. In 1963 the National Pension Company (*Statens pensionsverk*, SPV) was founded handling subsidiary company-based

2028 Wadensjö E. (2002), p. 58.
2029 Palmer E. (2002), p. 195.
2030 Schludi M. (2005), p. 89.
2031 Szumlicz T. (2004), pp. 297 and 298.
2032 http://www.scb.se/templates/tableOrChart____33883.asp, accessed 24 January 2008.
2033 Szumlicz T. (2004), p. 299.
2034 *Public Finances in Sweden 2006. 12. The old-age pension system* (2007), p. 126.
2035 Palme J. (2005), p. 147.
2036 Palme M., Svensson I. (2004), pp. 586 and 587.
2037 Szumlicz T. (2004), p. 286.

pensions of civil servants[2038]. In 1969 the so-called standard supplement to basic pension was introduced (*pensionstillskott*)[2039]. In 1970 the average pension equaled to 35% of the average salary[2040]. In 1971 blue-collar workers, represented by blue-collar workers' trade unions (*Landsorganisationen i Sverige*, LO), successfully negotiated their subsidiary company-based pension plan (*särskild tilläggspension*, STP)[2041] with the Swedish Confederation of Entrepreneurs (*Svenska Arbetsgivarföreningen*, SAF). In 1973 the Blue-Collar Workers' Insurance Company (*Arbetsmark nadsförsäkringar*, AMF) was established, which commenced carrying out the STP plan[2042]. In 1976 labour accident law was revised[2043]. After 1 July 1976, the retirement age was lowered to 65[2044]. In the same year a special retirement plan for part-time employees was introduced, which was called the partial pension (*delpension*). In order to be eligible for it, one had to meet the following requirements: 1) to be between 60 and 65 years of age, 2) working time had to be reduced by at least five hours a week, 3) the remaining working time should not be shorter than 17 hours a week, and 4) the person applying for such a pension should work for at least 10 years[2045] after turning 45. In 1977 a subsidiary, fully fund-based solution was introduced within the pension for registered professionals called the ITP (*industrins och handelns tilläggspension*). Contributions associated with that subsidiary plan constituted 2% of the salary and were fully paid by the employer[2046]. In 1980 only 5% of the working population had individual pension plans[2047]. Beginning in 1982, pension plan contributions were paid on all income[2048] and, beginning in 1984, they were paid directly to the

[2038] http://www.spv.se/Hem/Om_SPV/, accessed 26 January 2008.
[2039] Anderson K. M., Immergut E. M. (2007), p. 361.
[2040] Szumlicz T. (2004), p. 288.
[2041] Anderson K. M., Immergut E. M. (2007), p. 361.
[2042] http://www.amfpension.se/, accessed 30 January 2008.
[2043] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 311.
[2044] Wadensjö E. (2002), p. 59.
[2045] Wadensjö E. (2002), p. 60.
[2046] Palme M., Svensson I. (2004), p. 586.
[2047] Palme J. (2005), p. 151.
[2048] Palmer E. (2002), p. 191.

national tax office (*Riksskatteverket*, RSV). The replacement rate within the ATP amounted to 60%. Furthermore, an additional trade plan ensured the replacement rate at about 10%[2049]. In 1985 the average pension constituted about 75% of the average remuneration[2050]. In 1989 as much as 15% of the working population had individual pension plans[2051]. In 1991 another solution referring to the company-based pension plan for civil servants was introduced (*Pensionsplan för arbetstagare hos staten m fl*, PA-91). It was launched at the beginning of 1992 and provided for the existence of pension contributions and their division into two parts: the first, which constituted 1.7% of the salary, and was invested in the capital market, and the other one which functioned according to the pay-as-you-go formula. This change granted early retirement for civil servants at the age of 60. The pension was lowered by 0.4%[2052] for every month of retirement before the age of 65. In 1993 new requirements regarding the base pension were introduced. The employers paid the base pension fund contributions at 6.75% of the remuneration[2053]. To be eligible for the full base pension permanent residence on the territory of Sweden for at least 40 years between the ages 16 and 64 or 30 years' record of employment in Sweden[2054] were required. In June 1994[2055] a law concerning the 1st pillar pension was introduced. It functioned as a subsystem of the pay-as-you-go formula, where the solution was found in a notionally defined contribution (NDC). The system was enriched by privately managed individual financial accounts[2056]. Pension contributions were to constitute 18.5% of gross remunerations. 9.25% of it was to be paid by the employer and the employee. 16.0% of the contribution was to remain in the repartition sub-system, and the remaining 2.5% of the remuneration was to be directed at the fund

2049 Palmer E. (2002), p. 183.
2050 Szumlicz T. (2004), p. 288.
2051 Palme J. (2005), p. 151.
2052 Palme M., Svensson I. (2004), pp. 586 and 587.
2053 Anderson K. M., Immergut E. M. (2007), p. 363.
2054 Wadensjö E. (2002), p. 58.
2055 Könberg B., Palmer E., Sundén A. (2006), p. 449.
2056 Palmer E. (2002), p. 174.

subsystem[2057]. In the case of manual and communal workers, a subsidiary contribution was introduced, which was transferred to a quasi-mandatory pension plan. In the case of manual workers, the contribution was initially set at 2.0%. The means capitalized in the repartition subsystem were to be revalorized annually by the index of the remuneration growth. Those born prior to and in 1954 were to be entirely and mandatorily covered by the new solution. Those born between 1935 and 1953 were to be covered by both the old and the new system. According to the solution, those born in 1935 were to be covered by the old system in the proportion of 19/20, and in the proportion of 1/20 in the new system. Those born in 1936 were to be covered by the old system in the proportion of 18/20, and in the proportion of 2/20 in the new system, etc. Those born in 1934 and later were to be entirely covered by the old system. The proposed system could be defined as a repartition-capital solution (*inkomstgrundad* and *premiereservsystem*)[2058]. The Financial Inspection Office (*Finansinspektionen*)[2059] was to oversee the aforementioned system. The system was to be supported by a guaranteed pension (*garantipension*)[2060] and was to come into effect at the beginning of 1995[2061]. In 1994 the maximum retirement age for a partial pension was increased from 60 to 61. Also the minimum retirement age was increased from 60 to 61 as well as the requirement concerning the reduction of necessary working time ensuring eligibility for this kind of pension. The working time was to be reduced by 10 hours per week[2062]. The day of coming into effect of the reform of the pension system for the 1995 budget was moved from 1 January 1995 to 1 January 1997[2063]. In 1995 a new regulation concerning the indexation of the ATP pension plans was introduced, which took into

[2057] Wadensjö E. (2002), p. 63.
[2058] Szumlicz T. (2004), p. 286.
[2059] http://www.fi.se/, accessed 23 January 2008.
[2060] Szumlicz T. (2004), p. 286.
[2061] Könberg B., Palmer E., Sundén A. (2006), p. 455.
[2062] Wadensjö E. (2002), p. 60.
[2063] Schludi M. (2005), p. 101.

account a 60% increase in prices[2064], and the highest ATP pension amounted to SEK170,032[2065]. In 1996 the occupational workers' pension plan (STP) was transformed into a solution known as `pay-as-you-go´. This solution was fully capital with contributions amounting to 2.0% of gross remuneration[2066]. In the budget for 1997 the day of coming into effect of the reform of the pension system was moved from 1 January 1997 to 1 January 1999[2067]. In 1997, it was decided that those born between 1935 and 1937 were entirely covered by the old pension system[2068]. In the same year the Unemployment Insurance Law was revised[2069]. In 1998 three kinds of basic amounts functioned, namely: 1) price-based amount (*prisbasbelopp*), 2) price-increase base amount (*förhöjda prisbasbeloppet*), and 3) income base amount (*inkomstbasbeloppet*), and the price-based amount leveled at SEK36,400[2070]. In the same year the Pension Contribution Office (*Premie pensionsmyndigheten*, PPM)[2071] was founded to oversee pension capital funds. The minimum retirement age was also increased from 60 to 61[2072]. In 1998 the regulations concerning the functioning of the pension plan for local government office workers (PFA)[2073] were changed. Beginning on 1 October 1998, those covered by the STP plan got the right to decide about the financial instruments into which their contributions were to be invested[2074]. At the end of 1998 the employers ceased the payment of the contributions for the base pension[2075]. At the end of 1998, about SEK715

2064 Schludi M. (2005), p. 95.
2065 Palme M., Svensson I. (2004), p. 583.
2066 Palme M., Svensson I. (2004), p. 584.
2067 Schludi M. (2005), p. 101.
2068 Wadensjö E. (2002), p. 68.
2069 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 314.
2070 http://www.scb.se/templates/tableOrChart____33883.asp, accessed 24 January 2008.
2071 http://www.ppm.nu/, accessed 24 January 2008.
2072 Wadensjö E. (2002), p. 67.
2073 http://swoba.hhs.se/hastba/papers/hastba2000_001.pdf.zip, accessed 30 January 2008.
2074 *New scheme enables employees to choose how their pension contributions are invested* (1998).
2075 Anderson K. M., Immergut E. M. (2007), p. 363.

million[2076] was accumulated by the AP funds, and within the framework of preparations for the implementation of the subsystem of the capital pensions, 470 pension funds were registered. In 1999 changes were introduced that had been planned by the reform of 1994[2077]. The reform gave no special consideration to pensions from the point of view of taxation; according to the reform, pensions were treated as another source of income[2078]. Moreover, those covered by the new solution began receiving individual information about the state of their pension accounts[2079]. In 2000 the rate of contributions was increased within the occupational pension plan for blue-collar workers (STP) from 2.0% to 3.5% of gross remunerations[2080]. In 2001 the SPP changed its name to Alecta[2081] and the Confederation of Swedish Entrepreneurs (*Svenska Arbetsgivarföreningen*, SAF) and the Federation of Swedish Industry (*Industriförbundet*, IF) merged to establish the Confederation of Entrepreneurs of Sweden (*Svenskt Näringsliv*, SN)[2082], which became a partner of the trade unions in negotiations concerned with the functioning of the additional occupational pension plan. In May 2001 the acceptable retirement age was set at 67[2083], and starting in September 2001, communal partners could not sign collective clauses on agreements which referred to obligatory retirement before reaching 67[2084]. In November 2001 the first pensions following the NDC[2085] system were paid. In 2002 pension contributions were paid on income not exceeding SEK26,000 monthly[2086]. In the same year 625 pension funds functioned in the subsystem of capital pensions[2087] and 44% of

2076 Anderson K. M., Immergut E. M. (2007), p. 383.
2077 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 44.
2078 Palmer E. (2002), p. 175.
2079 *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 29.
2080 Palme M., Svensson I. (2004), p. 584.
2081 http://www.alecta.se/templates/Sida____1780.aspx, accessed 30 January 2008.
2082 Anderson K. M., Immergut E. M. (2007), p. 360.
2083 Wadensjö E. (2002), p. 59.
2084 Wiśniewski J. (2005), pp. 112 and 113.
2085 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 44.
2086 Granqvist L. and Ståhlberg A.-Ch. (2004), p. 229.
2087 Żukowski M. (2006), p. 98.

women and 36% of men between the age of 22 and 64[2088] were covered by private pension plans. In 2002 all residents who were 65 years of age were entitled to the residential pension. Pensions were paid out from taxes. To be eligible for a full residential pension, one had to have lived on the territory of Sweden for at least 40 years between the ages of 16 and 64 or needed a 30-year employment record in Sweden. If someone failed to meet the requirements, the pension was lowered accordingly[2089]. The minimum requirement for receiving a proportionally reduced pension was living on the territory of Sweden for at least 3 years. Pensions were also paid to all those who, being at the retirement age, did not live on the territory of Sweden any longer but fulfilled the time-of-residence requirement. The rate of residential pension for a single person could not be lower than 96% of the price-based amount[2090]. In addition, such a person received a pension benefit (*pensionstillskott*) which constituted 48% of the base price amount. Thus, the minimum pension constituted 144% of the base price amount[2091]. By the end of 2002 about 40% of the employed were covered by individual voluntary pension plans[2092]. At the beginning of 2003 all former beneficiaries of the residential pension and of the pension benefit received guaranteed pensions (*garantipension*), which were entirely paid from taxes[2093]. In 2003 all tax reliefs for pensioners were cancelled too[2094]. In the same year changes were made in the PA-91company-based pension plan for civil servants[2095]. The name of the plan was also changed to the PA-03. In December 2004 the Internet site minpension.se was created which provided information about all obligatory and professional pension plans[2096]. On 1 January 2005, the Social Insurance Company was transformed into the Social Insurance Fund

2088 *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 8.
2089 Palme M., Svensson I. (2004), pp. 580 and 581.
2090 Palme M., Svensson I. (2004), p. 582.
2091 Schludi M. (2005), p. 89.
2092 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 118.
2093 *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 12.
2094 Whitehouse E. (2007), p. 114.
2095 Granqvist L. and Ståhlberg A.-Ch. (2004), p. 225.
2096 https://www.minpension.se/Startsida.aspx, accessed 29 January 2008.

(*Försäkringskassan*)[2097]. SEK646 billion[2098] were accumulated in the National Pension Funds (*AP – funds*) in the middle of the year 2005. In 2005 there functioned about 700 pension funds in the framework of the capital pensions subsystem[2099]. From 1 July 2007, those covered by the ITP professional pension plans can join the plan with the definite pension contribution at the age of 25[2100]. In December 2007 in capital pension funds supervised by the PPM there were consolidated over SEK27 billion[2101]. In 2007 price-based (*prisbasbelopp*) amount leveled at SEK40.300, price-increase base amount was equal to (*förhöjda prisbasbeloppet*) SEK41.100[2102], and income base amount was at (*inkomstbasbeloppet*) SEK45.900[2103]. Price-based amount for 2008 is SEK41.000[2104].

### 2.26.3 The present state of the pension system in Sweden

The Swedish pension system incorporates two solutions for two different age groups: 1) the old pension system and 2) the new pension system. Additionally, for both age groups there exists a subsystem of guaranteed pensions (*garantipension*) known as the '0' pillar, which is totally financed from taxes. The requirement for pension eligibility is the age of 65 and living in Sweden for at least three years[2105]. To be eligible for a full guaranteed pension one has to live in Sweden for 40 years[2106]. A guaranteed pension constitutes 2.13 multiplied by a price-based amount[2107]. The old pension system is obligatory for those born before 1938; all of

2097 http://www.forsakringskassan.se/privatpers/, accessed 23 January 2008.
2098 *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 17.
2099 Palmer E. (2006), p. 37.
2100 http://www.ipe.com/news/Sweden_ITP_change_to_DC_gets_approval_584.php, accessed 30 January 2008.
2101 http://www.ppm.nu/CurrentIssues.html, accessed 24 January 2008.
2102 http://www.pppension.se/prisbasbelopp_2007_a526_s19_arkiv.html, accessed 26 January 2008.
2103 http://www.pppension.se/inkomstbasbeloppet_2007_a73_s19_arkiv.html, accessed 26 January 2008.
2104 http://www.scb.se/templates/tableOrChart____33883.asp, accessed 24 January 2008.
2105 Whitehouse E. (2007), p. 113.
2106 *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 9.
2107 In 2006 it amounted to SEK86.149 annually. Cf.: Anderson K. M., Immergut E. M. (2007), p. 366.

them receive pensions within the framework of this system. In the case of those born between 1938 and 1953, there is an intermediary solution, under which they receive pensions from both the old plan and the new one. Those born in 1938 are covered by the old plan in the proportion of 16/20, and in the new one in the proportion of 4/20, and those who were born in 1939 are covered by the old plan in the proportion of 15/20 and in the proportion of 5/20 – by the new one, etc. Those born after 1953 are not covered by the old system. Thus, those who retire in 2008, namely, those born in 1943 are covered by the old plan in the proportion of 11/20, and by the new one in the proportion of 9/20. The present state of the pension system in Sweden is presented in **Scheme no. 26**.

**Scheme no. 26**

**The present state of the pension system in Sweden**

<table>
<tr><th colspan="3">1st pillar</th><th colspan="4">2nd pillar</th><th>3rd pillar</th></tr>
<tr><td colspan="3">the ‘0’ pillar – a subsystem of guaranteed pensions garantipension</td><td colspan="4" rowspan="2">additional professional retirement fund – company based systems</td><td rowspan="3">the voluntary pensions – Individual pension plans individuellt pensionssparande, IPS</td></tr>
<tr><td>the old pension system – fully obligatory for those born before 1938 and partly obligatory for those born between 1938 and 1953</td><td colspan="2">the new pension system – partly obligatory for those born after 1937 and fully obligatory for those born after 1953</td></tr>
<tr><td>the base component - complementary pension Allmän Tilläggspension, ATP</td><td>the subsystem of repartition pensions – the pay-as-you-go formula with the notionally defined contribution (NDC) inkomstpension</td><td>the subsystem of capital pensions – the formula of the funded defined-contribution (FDC) premiereservsystem</td><td>blue-collar workers särskild tilläggspension, STP</td><td>white-collar workers industrins och handelns tilläggspension ITP</td><td>local government office workers Pensions- och försäkringsavtal, PFA</td><td>civil servants Pensionsplan för arbetstagare hos staten m fl PA-03</td></tr>
</table>

Source: Own elaboration.

**The old pension system** is comprised of three components: A) the base component, which is complementary pension (ATP), B) additional professional retirement fund, which comprises company based systems: a) the STP, b) the ITP, c) the PFA, and d) the PA-03, as well as C) the voluntary pensions which constitutes individual pension plans (IPS).

**Complementary pension (ATP)** is a contribution plan which covers all those who work and are older than 16, apart from the self-employed[2108]. Despite being a pay-as-you-go solution, the plan makes it possible to locate free capital on the market using the funds of five National Pension Funds (the AP funds)[2109]. Funds which are numbered from 1 to 4 invest in the balanced portfolio of Swedish and foreign stocks and bonds noted in the stock market, whereas fund 6 invests in selected stocks and shares of Swedish companies which are not listed on the stock exchange[2110]. The base pension is mandatory for those born before 1954 that pay contributions within its framework and receive pensions according to the aforementioned rules concerning date of birth. Those born after 1953 are not covered by this plan. On average, the base pension should provide the replacement rate at the level of 60%. People who are 65 years of age are eligible for pension. The minimum period of paying contributions is 3 years and the period required for the full pension eligibility (ATP) is 30 years[2111]. Pensions are calculated on the basis of the average income out of the best 15 years where the income taken into consideration cannot exceed multiplicity of 7.5 of income base amount[2112]. The amount of pension is calculated according to the following pattern:

$$\mathrm{ATP} = 0.6 \bullet p \bullet t/30 \bullet \mathrm{B},$$

where:

B – the rate of the income base amount in the year of retirement,

$p$ – the individual co-efficient, calculated as $p = (y\text{-B/B})$, where $y$ is the average income out of best 15 years of paying contributions in the range from $1.0 \bullet \mathrm{B}$ to $7.5 \bullet \mathrm{B}$,

[2108] Schludi M. (2005), p. 89.
[2109] Schludi M., (2005), p. 90.
[2110] *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 17.
[2111] Schludi M. (2005), p. 97.
[2112] Palme M. Svensson I. (2004), p. 582.

*t* – the number of years of employment when the income exceeded 1.0 • B.

The valorisation of the remuneration when calculating pension takes place thanks to changes in the rate of the income base amount in individual years. Early retirement is possible for those younger and older than 65. In the case of early retirement at 61, the calculated pension is reduced by 0.5% for every month of early retirement, and in the case of the postponed retirement, it is increased by 0.7% for every month respectively, until reaching 70 years of age[2113].

**Additional company-based pension plan** comprises four separate subsystems for different professional groups: blue-collar workers (STP), white-collar workers (ITP), local government office workers (PFA), and civil servants (PA-03)[2114]. Participation in the plan is quasi-obligatory[2115], as it is based on collective agreements and the contributions are paid by employers. The average retirement age is set at 65, however, it is possible to receive pension at 61 and even at 55, as well as it is possible to retire later, even at 70[2116]. About 90% of all those employed are covered by these plans[2117]. The remaining 10% who are employed on conditions different from the ones provided by the aforementioned subsystems can be covered by additional company-based retirement plans which are not based on collective agreements. It concerns white-collar workers employed in private companies with high remuneration rates[2118], only 17% of whom are covered by such retirement plans. On average, additional company-based pension plan ensures the replacement rate at the level of 10-15%[2119].

2113 *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 37.

2114 Szumlicz T. (2004), pp. 294 and 295.

2115 Certainly, one can declare unwillingness to pay pension contributions. The mandatory nature applies only to the obligation on the employer to inform the employee on the possibility of paying such contributions.

2116 *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 39.

2117 Granqvist L. and Ståhlberg A.-Ch. (2004), p. 231.

2118 In 2002 the amount of remuneration qualifying for such schemes was SEK32.000 monthly. Cf.: Granqvist L. and Ståhlberg A.-Ch. (2004), p. 236.

2119 *Joint Report on Social Protection and Social Inclusion 2007. Social Inclusion, Pensions,*

**The STP**[2120] is a company-based pension plan for blue-collar workers. It is based on the collective agreement signed between the Confederation of Employers (*Svenskt Naringsliv*, SN) and the Trade Union of Blue-Collar workers (*Landsorganisationen i Sverige*, LO). The plan covers the blue-collar workers who are 21 and are employed in the private sector. Pension contributions constitute 3.5% of remunerations. The plan functions within the framework of the definite contribution. All those covered by the plan have the right to decide how to invest their contributions[2121]. Pensions constitute 10% of the average remuneration out of 3 best years from the period between 55 and 59 years of age[2122]. Early retirement is possible at the age of 55. The plan is managed by the AMF[2123].

**The ITP** is a company-based pension plan for white-collar workers. It is based on the collective agreement signed between the Confederation of Employers (*Svenskt Naringsliv*, SN) and the Trade Unions of White-Collar Workers belonging to the Cartel of the Trade Unions of White-Collar Workers working for privately owned companies (*Privattjänst emannakartellen*, PTK), the Board of Trade Unions of White-Collar Workers (*Tjänstemännens Centralorganisationen*, TCO) and Registered Professionals (*Sveriges Akademikers Centralorganisation*, SACO). The plan covers white-collar workers who are 25 and older and are employed in the private sector. The plan functions within the framework of the definite contribution for all those born before 1 January 1979 and as the same formula for those who were born and turned 25 after this date. In the case of those who are covered by the definite pension, there exists a possibility of the increase in the contribution by 2% of remunerations and introduction of the program extended to the definite contribution (ITPK)[2124]. The plan also comprises the ITPG system, which guarantees

*Healthcare and Long Term Care* (2007), p. 395.

[2120] Another name for this scheme, derived from the names of the institutions signing the agreement is the SAF-LO scheme.

[2121] Granqvist L. and Ståhlberg A.-Ch. (2004), p. 233.

[2122] Palme M., Svensson I. (2004), p. 585.

[2123] *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 40.

[2124] *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 40.

the transfer of consolidated contributions to the STP in case of changing a profession. The requirement for the full pension eligibility is 65 years of age and 30 years of sufficient period of employment[2125] after turning 28. If a person entitled to pension fails to meet these requirements, the pension is proportionally lowered. If retired earlier, at the age of 60, the pension constitutes 73.9% of the amount one is entitled to at the age of 65. If retired at 70, the pension is increased to 144.8% of the amount one is entitled to at the age of 65[2126]. The pension rate depends on the remuneration rate in the last year of employment prior to retirement; the pension is extended by calculating to its amount 10% of remunerations up to 7.5 income base amount, 65% of remuneration within the range of 7.5 to 20.0 of income base amount and 32.5% of remuneration between multiplicity of 20 and 30 of income base amount[2127]. Early retirement is possible at the age of 55[2128]. Within the framework of the definite contribution formula, the employer pays the contribution at 4.5% of remunerations up to the level of 7.5 of income base amount and 30% of remuneration exceeding this amount[2129]. Pensions within the framework of this plan will be paid in 2047[2130]. The system is managed by Alecta; the system for registered professionals of the privatized, once state companies dealing with the post, telecommunication and insurance is managed by the SPV.

**The PFA** is a company-based pension plan for local government workers. It functions on the basis of the collective agreement signed by the Confederation of Institutions of the Local Government (*Svenska Kommunförbundet*) and the Trade Union of Local Government Workers. The plan functions under the formula of the defined benefit or the defined contribution. Office workers who are over 28 are covered by the formula of the defined benefit and those who are 21 are covered by the formula of the defined contribution. Under

[2125] Whitehouse E. (2007), p. 114.
[2126] Palme M., Svensson I. (2004), pp. 585-586.
[2127] Palme M., Svensson I. (2004), p. 587.
[2128] *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 40.
[2129] Nilsson J. (2007).
[2130] http://www.ipe.com/news/Sweden_ITP_change_to_DC_gets_approval_584.php, accessed 30 January 2008.

the formula of the defined benefit, the full pension is acquirable on condition of reaching the age of 65 and having 30 years of the sufficient period of employment in the sector of local government between the age of 18 and 65. The amount of pension depends on the remuneration rate of the last 5 years of employment before the retirement; the pension is calculated taking into account: 62.5% of remuneration from the range between 7.5 and 20.0 of the income base amount and 31.25% of remuneration ranging between the multiplicity of 20 and 30 of income base amount. Under the formula of the defined contribution, the contribution is set at the rate from 3.5% to 4.5% of remuneration. Early retirement (*kommunala tjänstepensionen*, KTP) is acquirable under the defined benefit formula at the age of 61 and under the defined contribution formula – at the age of 55[2131]. The system is managed by the KPA.

**The PA-03** is a company-based pension plan for civil servants. It functions on the basis of the collective agreement signed between the government and the Trade Unions of Civil Servants. The plan functions either within the framework of the defined benefit formula or the defined contribution formula. The defined benefit formula covers the civil servants who reached 23 and the defined contribution formula covers those who reached 28. The requirement for eligibility for the full pension under the formula of the defined benefit is to reach 65. The amount of pension depends on the remuneration rate of the last 5 years of employment prior to retirement; the pension is calculated taking into account: 60% of remuneration from the range between 7.5 and 20.0 of income base amount and 30.0% of remuneration ranging between multiplicity of 20 and 30 of income base amount. The defined contribution formula incorporates two variants: 1) the standard variant and 2) the so-called *Kåpan* variant. In consistency with the standard variant, pension contributions constitute 2.3% of remunerations and in the *Kåpan* variant 2.0% of remuneration. All these formulae foresee early retirement (*statlig tjänstepension*) acquirable at the age of 61[2132]. The system is managed by the SPV.

[2131] *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 40.
[2132] *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 40.

**Individual pension plans** (*individuellt pensionssparande*, IPS) function in the form of individual savings consolidated as pension contributions in banks, insurance funds and investment funds. Savings accumulated in these plans decrease the taxable base of the income tax to the amount which constitutes a half of price-based amount at 5% of remuneration which fits within the range of multiplicity between 10 and 20 of price-based amount[2133].

**The new pension plan** consists of three pillars: 1) the 1st pillar, which incorporates two elements[2134]: A) the subsystem of repartition pensions, and B) the subsystem of capital pensions (*premiereservsystem*), 2) the 2nd pillar, which comprises company-based systems: a) the STP, b) the ITP, c) the PFA, and d) the PA-03, as well as C) the 3rd pillar, or voluntary individual pension plans the IPS.

**The subsystem of repartitioning pensions** (*inkomstpension*) is a solution under the pay-as-you-go formula with the defined contribution under the convention of the notionally defined contribution (NDC)[2135]. All those who reached the age of 16, together with the self-employed[2136], are covered by the system. The pension contribution constitutes 18.5% of the gross remuneration where 10.21% is paid by the employer, to the rate of 8.07 of income base amount[2137], and over this amount to the rate of 5.105%, whereas the employee pays 7.0% only to the rate of 8.07 of income base amount[2138]. The pension contribution is calculated on the basis of 93% of the gross remuneration[2139]. The self-employed pay the contributions at the rate of 7.0% of the profit with reference to tax amount up to the rate of 8.07 of income base amount and additionally 10.21% of

2133 *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 8.
2134 Palmer E. (2006), p. 31.
2135 Palmer E. (2002), p. 174.
2136 Żukowski M. (2006), p. 97.
2137 In 2004 this threshold value amounted to SEK42.300.
2138 Anderson K. M., Immergut E. M. (2007), p. 364.
2139 *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 5.

profit with reference to tax without a limit of amount[2140]. 16.0% of the contribution paid remain in the subsystem of repartition pensions, and 2.5% goes to the subsystem of capital pensions. Means consolidated on individual accounts are valorized by the index of the average growth of the remuneration[2141]. The system formally defines the threshold of the retirement age at 61[2142], the retirement most often takes place between the ages of 61 and 67[2143]. The pension is calculated by division of the amount of consolidated means at an individual account by actuarially calculated number of years after the retirement[2144]. Granted pensions are valorised by a regulated index (*följsamhetsindex*), which is based on the income increase index, decreased at 1.6%[2145].

**The subsystem of capital pensions** (*premiepension*) functions within the formula of the funded defined-contribution (FDC) and is realized by means of transfer of the contribution constituting 2.5% of remuneration to not more than 5 pension funds selected by the participant. The retirement age is flexible and the retirement is possible after reaching 61[2146]. There are about 700 capital pension funds on the market at present, alongside with the State Fund of Contributions Saving (*Premiesparfonden*)[2147], which is a default fund for those who failed to select a fund[2148]. The pension is calculated by division of the amount of consolidated means at an individual account by actuarially calculated number of years after the retirement[2149]. The Inspectorate of Contribution Pensions (PPM)[2150], which also keeps individual accounts of all the participants of the system[2151], supervises

[2140] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 309.
[2141] Kruse A., Palmer E. (2006).
[2142] *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 118.
[2143] Gronchi S., Nisticò S. (2006), p. 499.
[2144] Könberg B., Palmer E., Sundén A. (2006), p. 456.
[2145] Anderson K. M., Immergut E. M. (2007), p. 366.
[2146] Whitehouse E. (2007), p. 113.
[2147] *The Swedish National Strategy Report on Adequate and Sustainable Pensions* (2005), p. 7.
[2148] Anderson K. M., Immergut E. M. (2007), pp. 362 and 363.
[2149] Könberg B., Palmer E., Sundén A. (2006), p. 456.
[2150] http://www.ppm.nu/, accessed 24 January 2008.
[2151] Palme J. (2005), p. 155.

the institutions functioning within the framework of the system. Social insurance contributions are not paid from the pensions[2152].

**Company-based systems**: the STP, the ITP, the PFA, and the PA-03, as well as **individual pension plans** in the new system are equal to the existing ones in the old system.

### 2.26.4 Challenges and planned changes in the pension system in Sweden

The biggest challenge to the retirement system in Sweden is the demographic situation. In 2025 the number of pensioners in proportion to the number of those employed will amount to 40%[2153]. Those born in 1953 will retire in 2018 – they will be the last to be covered by the old retirement system. Those born after 1954 will be totally covered by the new retirement solution[2154]. The applied retirement solution makes the sustainability of the system independent of the demographic situation except for those with a very low income.

### 2.26.5 Summary

The retirement system in Sweden seems to be a well-organized mechanism ensuring retirement contributions. Initially, original Scandinavian concept of financing the retirement was consecutively replaced by, at first, the Bismarck's solution and after that by the Beveridge's solution, connected with the functioning of the social welfare-state. However, the reform which was implemented in 1960, and the next reform of 1994, which came into effect at the beginning of 1999, made up the two following steps which parted from the Swedish solution of considering pension as a social benefit, which was only an obligation of the state. With the time, pensions became a sort of salary, which was dependent on the remuneration and the result of the individual forethought. Gradual

[2152] Whitehouse E. (2007), p. 114.
[2153] Holzmann R., MacKellar L., Rutkowski M. (2003), p. 44.
[2154] Könberg B., Palmer E., Sundén A. (2006), p. 450.

departure from the old retirement system, but at the same time retention of such elements as a guaranteed pension in the new system make the outline of the Swedish retirement system complete and generally accepted due to the implemented solutions.

A special Internet portal, where all the information about the balance of the individual pension accounts within all schemes is available, is an interesting solution if compared to other systems at the international level.

## 2.27 THE UNITED KINGDOM

### 2.27.1 General information about the country

The United Kingdom of Great Britain and Northern Ireland[2155] is a parliamentary monarchy[2156] situated in the north-west of Europe, on the British Islands, between the North Sea and the Atlantic Ocean. The United Kingdom comprises England, Wales and Scotland, which jointly occupy the island of Great Britain, and Northern Ireland, situated in the north-eastern part of the island of Ireland. Guernsey, Jersey and the Isle of Man have a status of dependencies of the British Crown. Another type of dependent territories are Gibraltar, Anguilla, the Bermuda Islands, the British Virgin Islands, the Falkland Islands, South Georgia and the South Sandwich Islands, the Cayman Islands, Montserrat, Turks and the Caicos Islands, Saint Helena, British Indian Ocean Territory, and Pitcairn.

The official language is English. The largest ethnic group were the English, constituting 83.6% of the population. The next most numerous ethnic groups were the Scots – 8.6%, the Welsh – 4.9%, and the Irish

2155 *Wielka Encyklopedia PWN* (2005), v. 29, pp. 203 and further.

2156 The Queen is also the head of state in Antigua and Barbuda, in the Bahamas, in Barbados, Belize, Grenada, Jamaica, Papua New Guinea, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, the Salomon Islands, in Tuvalu. In several countries there is a personal union with the United Kingdom: in Canada since 1867 (the Queen of Canada), in Australia since 1971 (the Queen of Australia) and in New Zealand since 1974 (the Queen of New Zealand).

– 2.9% of the population. Of the non-European ethnic groups, 2.0% of the population consisted of people of African descent, 1.8% of people originating from India and 1.3% from Pakistan. The Christians (including Anglicans, Catholics, Presbyterians, and Methodists) added up to 71.6% of the population, 23.1% of the population did not declare any religious affiliations, and 2.7% were Muslims.

Britain has no written constitution. According to the statutes and the common law, the Queen is the head of the state and the government is led by the Prime Minister.

In 1949 Britain was a founding member of the NATO. In 1973 the United Kingdom became a member of the European Economic Community.

The monetary unit is the pound sterling[2157] (GBP[2158]).

The GDP *per capita* (PPP) was estimated in 2007 at US$35,300, with the growth rate of 2.9%. The public debt was equal to 43.3% of the GDP. The current account of the balance of payments showed in 2007 a deficit of US$111.0 billion.

The unemployment rate was 5.4%.

In July 2007, the United Kingdom was inhabited by 60,776,238 people[2159], within the following age groups: 0-14 years of age – 17.2%, 15-64 years – 67.0%, 65 years and older – 15.8%. The average life expectancy at birth was 78.7 years, for men – 76.23 years, and women – 81.3.

[2157] Currently the British pound sterling divides into 100 pence. Until 15 February 1971, one British pound sterling consisted of 240 pence (abbreviation: `d´, from `denarius´), or 20 shillings (`l´, or `s´ from Latin `solidus´). One penny, after the decimalization of the British currency in 1971, was called `a new penny´ to stress out the difference in value.

[2158] According to the ISO 4217 standard. On 31 December 2007, EUR1 was worth GBP0.73335. Cf.: http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-gbp.en.html, accessed 24 February 2008.

[2159] https://www.cia.gov/library/publications/the-world-factbook/geos/uk.html, accessed 31March 2008.

### 2.27.2 Historic development of the pension system in the United Kingdom

The beginnings of the British pension system date back to the early years of the 17th c., when in 1601 the Elizabethan Act for the Relief of the Poor[2160] was enacted and made parishes responsible for the care over the poor. The first occupational pension system for civil servants was created in 1810, but its application was limited only to those who had become disabled. A system to cover all civil servants with at least 45 years of duty was created in 1834[2161]. It granted the retired civil servants a 1/60 part of their last salary for each year in service[2162]. In the mid-19th c., first occupational pension schemes for blue-collar workers became to exist[2163]. In 1897 the first legal regulation was made that concerned accident insurance[2164]. The Old Age Pension Act of **1908** introduced first state pensions to all the poor aged at least 70 whose yearly income was under £31[2165] and were assessed as worthy of help. The eligibility criteria included a morality test consisting of three elements: 1) having not received poor relief over the last 10 years, 2) having not been convicted and imprisoned for an offence, and 3) having been employed. Pensions had a character of non-contribution benefits, totally financed by taxes[2166]. In 1911 first regulations regarding health insurance and unemployment were implemented[2167]. The Widows', Orphans', and Old Age Contributory Pensions Act of 1925 ensured pensions for these groups of beneficiaries. The act provided for contribution-financed pensions for people aged between 65 and 70[2168]. The pensions were uniform in size and were paid weekly: 10 shillings to a single person and 1 pound to a couple. People

2160 Wiśniewski J. (2005), p. 61.
2161 Schulze I., Moran M. (2007b), p. 60.
2162 Czajka Z. (2003), p. 194.
2163 Schulze I., Moran M. (2007b), p. 60.
2164 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 333.
2165 Schulze I., Moran M. (2007b), p. 59.
2166 Czajka Z. (2003), p. 194.
2167 *Social Security Programs Throughout the World: Europe, 2006* (2006), pp. 331 and 334.
2168 Żukowski M. (2004), p. 308.

older than 70 received their pensions on the grounds of the Act of 1908. In 1936 as many as 6,544 employers offered pension schemes, which covered in total over 1.6 million of employees[2169]; however, after 1938 only 18% of the working population received additional company pensions[2170]. The Old Age and Widow's Pension Act of 1940 brought down the retirement age for women from 65 to 60[2171] and introduced a new type of pension benefit: supplementary pension. The Beveridge's proposal, put forward in 1942[2172], provided for a uniform pension contribution paid by all employees, as well as uniform pensions paid to all those who reached the retirement age and did not have a sufficient subsistence income. This way, the contribution was a form of a tax paid by all employees, while the pension benefit was tantamount to a benefit for the needy. Beveridge's concept won support and its legal application took place in 1945-1948. As soon as in 1945, the Family Allowances Act[2173] was passed, and in 1946 the National Insurance (Industrial Injuries) Act and National Insurance Act of 1946[2174] took care of industrial injuries and retirement benefits. The Basic State Pension (BSP) was financed by contributions, whose amount depended on to which retirement category the payer belonged. The insurance category was determined by age, sex, marital status, and professional position. The contributions were paid to the National Insurance Fund (NIF), which had operated by the pay-as-you-go[2175] formula from the very beginning. The benefit was fixed and every entitled person received originally 24 shillings per week. In 1948 the National Health Service was brought to life, and the National Assistance Act was passed. In 1955 as many as 33% of those employed received additional company pensions[2176]. In 1959 the

[2169] Schulze I., Moran M. (2007b), p. 60.
[2170] Czajka Z. (2003), p. 200.
[2171] Schulze I., Moran M. (2007b), p. 59.
[2172] Beveridge W. (1942).
[2173] *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 335.
[2174] Hill M. (2002), p. 39.
[2175] *Social Security Privatization: Experiences Abroad* (1999), p. 28.
[2176] Czajka Z. (2003), p. 200.

National Insurance Act of 1959 revised the pension law, implementing as of 1961[2177] moderate graduated pensions that depended on the earnings and were paid according to the Graduated Retirement Scheme (GRS). That kind of pension was paid to the employees who had earned between £9 and £15 per week and paid contributions of 4.25% of their remuneration. In 1963 around 48% of all employees belonged to company pension schemes[2178]. The National Insurance Act of 1966 broadened the system of earnings-dependent pensions. The Social Security Act of 1973 was soon replaced by the Social Security Pensions Act of 1975, which abolished the GRS pensions. In 1975-1977 the contributions on the obligatory social insurance were equal to 14.5% of the pay, of which 8.75% of the remuneration was paid by the employer and 5.75% by the employee[2179]. In 1977, the health insurance law was amended[2180]. In 1978 the State Earnings Related Pension Scheme (SERPS)[2181] replaced gradable pensions. The additional pensions paid under this scheme were financed by National Insurance Contributions, which were paid jointly by the employee and the employer, initially as 4.8% of the remuneration. The amounts of these contributions were published every year in the Budget. The system provided that every person who had worked for 20 years should receive additional pension equal to 25% of their average earnings. The contributions towards the SERPS were obligatory for all employees except for those who belonged to occupational pension schemes offering pensions at least equal to the SERPS. At the same time, the indexation of pensions was introduced; the pensions were to stay in keeping with the growth of prices or the growth of pay, depending on which one was higher. The next amendment, i.e. the Social Security Act of 1980, stipulated that the state pensions are to be indexed according to changes in prices. In 1983 the Pensions Advisory Service (TPAS)[2182] was created. The Social

2177 Żukowski M. (2004), p. 309.
2178 Hill M. (2002), p. 42.
2179 Czajka Z. (2003), p. 202.
2180 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 331.
2181 Blundell R., Meghir C. and Smith S. (2004), p. 646.
2182 Thornton P. (2007), p. 15.

Security Act of 1986, changed on 1 April 1999, the SERPS payment calculation method from 25% of the average remuneration of the best 20 years to 20% of the average remuneration of the whole career. This act also reduced, on 1 October 2001, the pension benefits paid to the relatives of deceased pensioners from 100% to 50% of their pensions. Moreover, it introduced the possibility of participation in additional private pension schemes (PPS) for all members of occupational pension schemes, as well as provided for a discount of 2% on the pension contribution for the members of the PPS in the period from 1 April 1988 to 1 April 1993. In 1988 those employers who were running their own pension schemes were obliged to offer these schemes to all their employees[2183]. At the same time, employees were given a choice to participate either in the state SERPS (opt-in) or in a preferred vocational scheme (opt-out), or in the newly introduced scheme of personal pensions (PPs)[2184]. Under the Social Security Act of 1990, the institution of the Pensions Ombudsman (PO)[2185] was created. In 1990 the retirement contribution of the members of the SERPS was 9.0% of their remuneration between the upper and lower thresholds, while their employers paid 9.0% of the total remuneration. In 1991 as many as 98% of the employees were covered by the base state pension system. Also, 49% of all the employed participated in defined benefit occupational schemes, 28% in private pension schemes, 20.0% in the SERPS, and 2.0% in defined contribution occupational schemes[2186]. In 1992, the law on accident insurance and family benefits was amended[2187]. The Social Security Act of 1993 decreased the reduction on the pension contribution for members of the PPS to 1% of their remuneration, and limited the entitlement to those who were at least 30 years old. Additionally, since 1993 the Parliament has had the right to transfer to the NIF the so-called Treasury Grant of up to 17% of the expenditure of the fund, in

[2183] Blake D. (2002), p. 319.
[2184] Hughes G., Sinfield A. (2004), p. 165.
[2185] Thornton P. (2007), p. 15.
[2186] Czajka Z. (2003), p. 221.
[2187] *Social Security Programs Throughout the World: Europe, 2006* (2006), pp. 333 and 335.

the case of a capital shortage[2188]. In 1994 the Personal Investment Authority (PIA)[2189] was created in order to supervise private pension schemes. In 1995 the regulations regarding unemployment were amended[2190] and the Pension Act of 1995 decided that the retirement age of women will be gradually raised to 65 years, starting in 2010. Also in the same year an act was passed which created the Occupational Pensions Regulatory Authority (OPRA)[2191]. This act abolished, as of April 1997, the obligation to assure the so-called Guaranteed Minimum Pension (GMP) in all pension schemes except for the COSRS. In the fiscal year 1997/1998 the full BSP was equal to £62.45 per week[2192]. In 1998 the government published *The Green Paper of Spring 1998*, which laid out the propositions for changes to the pension system. In that year the maximum state pension was equal to 16% of the average pay[2193]. In April 1999 the Minimum Income Guarantee (MIG)[2194], equal to 18% of the average industrial pay[2195], which at that time was £75 per week[2196], was introduced for all people aged at least 60. Another novelty was the tax abatement on pension savings kept in individual savings accounts. The Financial Services and Markets Act of 2000 brought to life the following institutions[2197]: the Financial Services Authority (FSA), the Financial Ombudsman Service (FOS), and the Financial Services Compensation Scheme (FSCS). In April 2001, stakeholder pension schemes (SPSs)[2198] were introduced for employees of smaller companies and, starting from October that year, the employers of at least 5 employees were obliged

2188 Schulze I., Moran M. (2007b), p. 64.
2189 http://www.finance-glossary.com/terms/Personal-Investment-Authority.htm?ginPtrCode=00000&id=1128&PopupMode, accessed 12 February 2008.
2190 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 334.
2191 Żukowski M. (2004), p. 314.
2192 *Social Security Privatization: Experiences Abroad* (1999), p. 29.
2193 Holzmann R., MacKellar L., Rutkowski M. (2003), p. 45.
2194 Blundell R., Meghir C. and Smith S. (2004), p. 649.
2195 Wiśniewski J. (2005), p. 184.
2196 Blake D. (2002), p. 325.
2197 Thornton P. (2007), p. 15.
2198 Blake D. (2002), p. 320.

either to pay the the SERPS contributions or to offer pensions from vocational or private schemes[2199]. In December 2001, the Financial Services Authority (FSA) started supervising additional private pension schemes[2200]. In April 2002, the SERPS was replaced by the State Second Pension Scheme (S2P)[2201], and the Pension Service was created – an agency within the Department for Work and Pensions (DWP)[2202], whose responsibility was to handle state pensions[2203]. At the end of 2002, the BSP was equal to £3,896 annually[2204]. In April 2003 the value of the MIG rose to £100 per week[2205], and in October 2003 it was replaced by the so-called Guarantee Credit (GC), which was granted every 5 years[2206] to people aged 60 or older. The GC, and the so-called Savings Credit (SC) available to people aged 65 or older, were the two elements of the pension credit (PC)[2207]. In 2004, state pensions (BSP and S2P) started to be valorised by the retail price index, but not less than 2.5% annually[2208], and the capital kept in the Individual Savings Accounts (ISA) ceased to be subject to income tax[2209]. The Pensions Act of 2004 brought to life the Financial Assistance Scheme (FAS), a special governmental institution created in order to fulfil pension obligations of bankrupt companies. In November 2004 the state BSP and S2P pensions provided jointly an average pension on the level of 37% of average pay. At the end of 2004, the full BSP for a single person was £79.60 per week[2210]. In 2005 the Occupational Pensions Regulatory Authority (OPRA) was replaced by

2199 *The Handbook of Western European Pension Politics* (2007), p. 856.
2200 *United Kingdom National Strategy Report on Adequate and Sustainable pensions: An update to the European Commission on the UK's progress since 2002* (2005), p. 25.
2201 Blake D. (2002), p. 318.
2202 http://www.dwp.gov.uk/, accessed 11 February 2008.
2203 *The Handbook of Western European Pension Politics* (2007), p. 857.
2204 Whitehouse E. (2007), p. 119.
2205 Blake D. (2002), p. 325.
2206 Wiśniewski J. (2005), p. 184.
2207 Czajka Z. (2003), p. 238.
2208 Mattil B. (2006), p. 233.
2209 Emmerson C. (2005), p. 175.
2210 Mattil B. (2006), p. 232.

the Pensions Regulator (TPR)[2211]; moreover, a number of other institutions created by the Pensions Act of 2004[2212] started their operation: the Pensions Regulator Tribunal (TPRT), the Pension Protection Fund Ombudsman (PPFO), and the Pension Protection Fund (PPF). The PPF started to accumulate capitals collected in contributions by vocational pension schemes working by the defined benefit formula, thus protecting members of such funds against insolvency of their employers[2213]. In 2005 a decision was made that the increase in the BSP for each year of the postponed retirement will be equal to 10.4%[2214]. At the end of 2005, there were around 8,500 defined benefit occupational pension schemes on the market. Starting from April 2006, a uniform rules for tax privileges were introduced for all non-state pension schemes[2215]. From that moment employees could transfer 100% of their remunerations, up to the limit of £215,000 annually and £1.5 million during the whole life, to pension schemes and enjoy tax privileges[2216]. In April 2006 a raport was published[2217] that advised to create a new public pension (the National Pension Savings Scheme, NPSS), in which the obligatory contribution would equal to 7.0% of the remuneration, of which 4.0% would be paid by the employee and 3.0% by the employer. In November 2006 a legal regulation was adopted which provided for gradual increase, in years 2024-2046, in the state pension age to 68[2218]. The Pensions Act of 2007 founded the Personal Accounts Delivery Authority (PADA), whose role

[2211] Sillam R. (2005).
[2212] Thornton P. (2007), p. 15.
[2213] Schulze I., Moran M. (2007b), p. 62.
[2214] Mattil B. (2006), p. 101.
[2215] *United Kingdom National Strategy Report on Adequate and Sustainable pensions: An update to the European Commission on the UK's progress since 2002* (2005), p. 6.
[2216] In 2010 the life-cycle limit is due to rise to £1.8 million.
[2217] http://www.webarchive.org.uk/pan/16806/20070717/www.pensionscommission.org.uk/www.pensionscommission.org.uk/publications/2006/final-report/final_report.pdf, accessed 10 February 2008.
[2218] *Joint Report on Social Protection and Social Inclusion 2007. Social Inclusion, Pensions, Healthcare and Long Term Care* (2007), p. 404. Precisely speaking, the retirement age is to be increased from 65 to 66 years between 2024 and 2026, from 66 to 67 years between 2034 and 2036, and finally up to 68 years between 2044 and 2046.

was to implement the NPSS from 2012 onwards, in the form of a notional defined contribution system (NDC)[2219]. From April 2007, the S2P has become a defined benefit system for people from the same income cohorts, and the retirement age of the newly employed civil servants was determined to be 65 years instead of 60, even though the retirement age of those currently working remained unchanged.

### 2.27.3 The present state of the pension system in the United Kingdom

The British pension system comprises two `layers´: 1) the first one is the base state pension (BSP), and 2) the second one consists of three pillars: a) supplementary state pension, b) supplementary occupational pension, and c) supplementary private pension. All types of pension payouts are taxable, but those retired do not pay social insurance contributions[2220]. There is also a `zero layer´ in the form of the tax-funded personal credit (PC), which ensures that all people over 69 will have the minimum income of £119.05 per week[2221]. This layer includes also a number of other elements, like the Winter Fuel Payments amounting to £300 payable to all those aged 80 or older[2222], a free TV licence for everyone aged 75 or older, and free rides by municipal transportation. In Scotland pensioners are also entitled to free nurse care and free installation of central heating[2223]. There is a separate pension system for the civil servants[2224], where pension benefits depend on the last salary and the standard retirement age is 60[2225]. The present state of the pension system in the United Kingdom is presented in **Scheme no. 27**.

2219 http://www.dwp.gov.uk/pensionsreform/pdfs/PensionsBillImpactAssessmentDec07Chapter3.pdf, accessed 11 February 2008.
2220 Żukowski M. (2004), p. 319.
2221 In 2007/2008, meaning by the end of March 2008.
2222 http://www.thepensionservice.gov.uk/winterfuel/, accessed 11 February 2008.
2223 *United Kingdom National Strategy Report on Adequate and Sustainable pensions: An update to the European Commission on the UK's progress since 2002* (2005), p. 10.
2224 Mattil B. (2006), p. 240.
2225 In relation to civil servants whose employment started in April 2007 and later, the retirement age is 65.

**Scheme no. 27**

**The present state of the pension system in the United Kingdom**

<table>
<tr><td rowspan="5">2nd layer</td><th>1st pillar</th><th colspan="6">2nd pillar</th><th colspan="5">3rd pillar</th></tr>
<tr><td rowspan="2">supplementary state pension – the State Second Pension Scheme (S2P)</td><td colspan="6">supplementary occupational pension – occupational pension schemes</td><td colspan="5">supplementary private pension</td></tr>
<tr><td rowspan="2">contracted-in salary-related scheme (CISRS)</td><td rowspan="2">contracted-in money-purchase scheme (CIMPS)</td><td rowspan="2">contracted-out salary-related scheme (COSRS)</td><td rowspan="2">contracted-out money-purchase scheme (COMPS)</td><td rowspan="2">contracted-out mixed benefit scheme (COMBS)</td><td rowspan="2">contracted-out hybrid scheme (COHS)</td><td colspan="2">personal pension scheme (PPS)</td><td rowspan="2">group personal pension scheme (GPPS)</td><td rowspan="2">stakeholder pension scheme (SPS)</td><td rowspan="2">individual savings accounts (ISA)</td></tr>
<tr><td rowspan="2">pensions are paid by the Department of Work and Pensions</td><td>the appropriate PPS</td><td>a supplementary scheme</td></tr>
<tr><td colspan="6">supervised by the Pension Regulator (TPR) in cooperation with the Pensions Ombudsman (PO)</td><td colspan="5">supervised by the Personal Investment Authority (PIA)</td></tr>
</table>

<table>
<tr><td>1st layer</td><td>the base state pension (BSP)</td><td>governed by Her Majesty's Revenue and Customs (HMRC) under the supervision of the Department of Work and Pensions (DWP)</td></tr>
</table>

<table>
<tr><td>`0' layer</td><td>the personal credit (PC)</td></tr>
</table>

Source: Own elaboration.

**The base state pension** is financed by the NICs paid by all employees, including civil servants, the self-employed[2226] and farmers.

The NICs are used to finance pension spending within the base and additional state pension systems. Pension contributions fall into the following classes[2227]:

1) Class 1, where the contribution from earnings contained between the Earnings Threshold (ET)[2228] and the Upper Earnings Limit (UEL)[2229] is equal to 23.8% of the earnings, of which the employer pays 12.8%, and the employee 11.0%; in this class, contribution from earnings lower than the ET are paid only by the employee at the level of 2% of the remuneration[2230], and contributions from earnings exceeding the UEL are paid both by the employer and the employee, as 12.8% and 1.0% of the remuneration, respectively;
2) Class 2, where the contribution of £2.20 per week[2231] is paid by owners of small businesses[2232] whose income is higher than the small earnings exception (SEE)[2233], but higher than the Lower Profits Limit (LPL)[2234];
3) Class 3, where the contribution of £7.80 per week[2235] is paid voluntarily by people who do not work or live abroad and want to obtain the BSP and the S2P in the future;

[2226] Mattil B. (2006), p. 93.
[2227] Schulze I., Moran M. (2007b), p. 64.
[2228] In the fiscal year 2007/2008 it is £100 per week. Cf.: http://www.hmrc.gov.uk/rates/nic.htm, accessed 11 February 2008.
[2229] In the fiscal year 2007/2008 it is £670 per week. Cf.: http://www.hmrc.gov.uk/rates/nic.htm, accessed 11 February 2008.
[2230] *The Handbook of Western European Pension Politics* (2007), p. 857.
[2231] In the fiscal year 2008/2009 it will be £2.30 per week. Cf.: http://www.hmrc.gov.uk/rates/nic.htm, accessed 11 February 2008.
[2232] What is important for the British small business is the fact that business owners pay the obligatory pension contributions only if their income is higher than the SEE.
[2233] In the fiscal year 2007/2008 it is £4,635 annually. In the tax year 2008/2009 it will be £4,825. Cf.: http://www.hmrc.gov.uk/rates/nic.htm, accessed 11 February 2008.
[2234] In the fiscal year 2007/2008 it is £5,225 annually. In the fiscal year 2008/2009 it will be £5,435. Cf.: http://www.hmrc.gov.uk/rates/nic.htm, accessed 11 February 2008.
[2235] In the fiscal year 2008/2009 it will be £8.10 per week. Cf.: http://www.hmrc.gov.uk/rates/nic.htm, accessed 11 February 2008.

4) Class 4, where contributions are paid by business owners whose income is higher than the lower profit limit (LPL); they pay as contribution 8% of that part of their income that falls under the Upper Profits Limit (UPL)[2236] and 1% on that part of the income which is higher than the UPL if such a situation takes place.

Of the capital accumulated in contributions, 15% goes to the National Health Service Fund[2237], and the rest remains in the National Insurance Fund (NIF)[2238], which is an insurance against the risk of old age, unemployment, and a long-term illness. The State Pension Age (SPA) is 65 years for men and 60 years for women[2239]. There is no possibility of early retirement; it is possible to postpone retirement by up to 5 years, with a 10.4% bonus in retirement benefit for each year of extra work[2240]. In the case of those who work longer than the state pension age requires, the pension contribution is paid exclusively by the employer[2241]. The retirement benefit is paid in full to any man who has worked for at least 44 years or woman who has worked for at least 39 years[2242]. The minimum contribution period for pension entitlement is 10 years[2243]. The full value of the pension from this scheme is uniform for all and in the fiscal year 2007/2008 is equal to £87.30 per week[2244], which is about 16% of the average pay[2245]. Pensions are re-valued in line with the retail price index, but not less than 2.5% annually. The amounts transferred as contributions are not taxable, but pension benefits are[2246]. The scheme is governed

2236 In the fiscal year 2007/2008 it is £34,840 annually. In the fiscal year 2008/2009 it will be £40,040. Cf.: http://www.hmrc.gov.uk/rates/nic.htm, accessed 11 February 2008.
2237 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 329.
2238 Mattil B. (2006), p. 97.
2239 *Synthesis report on adequate and sustainable pensions. Annex. Country summaries* (2006), p. 123.
2240 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 330.
2241 *The Handbook of Western European Pension Politics* (2007), p. 857.
2242 Mattil B. (2006), p. 100.
2243 Schulze I., Moran M. (2007b), p. 64.
2244 http://www.direct.gov.uk/en/MoneyTaxAndBenefits/PensionsAndRetirement/StatePension/DG_10014671, accessed 11 February 2008.
2245 Wiśniewski J. (2005), p. 181.
2246 Mattil B. (2006), p. 103.

by Her Majesty's Revenue and Customs (HMRC)[2247] (which replaced in the Inland Revenue National Insurance Office (NICO)), under the supervision of the Department of Work and Pensions (DWP)[2248].

**The State Second Pension Scheme (S2P)** is also financed by the NICs. The contribution is paid in full in the income band between the Lower Earnings Limit (LEL)[2249] and the Upper Earnings Limit (UEL)[2250] by all the employed aged between 16 and the retirement age who do not participate in the additional company pension schemes or additional personal pension schemes. In the case of participation in non-public pension schemes, the NICs paid by employees are reduced by 3.7% in the case of salary-related schemes and by 1.4% in the case of money-purchase schemes[2251]. The standard retirement age is 65 years for men and 60 for women. The full retirement is paid to a person who has worked at least 49 or 44 years, respectively for men and women[2252]. This scheme does not include the self-employed. The pension benefit is paid in the same amount to all those belonging to the same earning category, regardless of the factually paid contributions. The replacement rate for people with the lowest income is at the level of 40%[2253], and for the people with the highest income it is at the level of 10%[2254]. Earnings below £11,600 yearly are treated as if they were £11,600[2255]. Pensions are indexed in line with the retail price index, but not less than 2.5% annually. Amounts transferred

[2247] http://www.hmrc.gov.uk/, accessed 8 February 2008.
[2248] Schulze I., Moran M. (2007b), p. 61.
[2249] In the fiscal year 2007/2008 this limit is £87 per week. In the fiscal year 2008/2009 this limit will be £90 per week. Cf.: http://www.hmrc.gov.uk/rates/nic.htm, accessed 11 February 2008.
[2250] In the fiscal year 2007/2008 this limit is £670 per week. In the fiscal year 2008/2009 it will be £770 per week. Cf.: http://www.hmrc.gov.uk/rates/nic.htm, accessed 11 February 2008.
[2251] http://www.hmrc.gov.uk/rates/nic.htm, accessed 11 February 2008.
[2252] Emmerson C. (2005), p. 186.
[2253] Wiśniewski J. (2005), p. 184.
[2254] Whitehouse E. (2007), p. 119.
[2255] Mattil B. (2006), p. 233.

as contributions are not taxable[2256], but pension benefits are[2257]. Pensions are paid by the Department of Work and Pensions. Those who were employed in 1978-2002 still receive their additional pension from the SERPS[2258], and those employed in 1961-1975 from the GRS[2259].

**Occupational pension schemes** are set up by larger companies, often as an element of collective bargaining. Contribution are paid only by the employer and belong to one of the six categories[2260]. Two of these categories are independent of external parameters (contracted-in): 1) contracted-in salary-related scheme (CISRS) and 2) contracted-in money-purchase scheme (CIMPS); the remaining four (contracted-out) do depend on external factors: 3) contracted-out salary-related scheme (COSRS), 4) contracted-out money-purchase scheme (COMPS), 5) contracted-out mixed benefit scheme (COMBS), and 6) contracted-out hybrid scheme (COHS). The accumulated capital is invested in financial markets; around 70% of the assets is invested in the United Kingdom[2261]. The contributions paid by the employees are not taxable until a certain level, and those paid by the employers constitute their tax deductible expenses[2262]. Returns on investments are not subject to taxation[2263], but pension benefits are considered as taxable income. These systems are supervised by the Pension Regulator (TPR) in cooperation with the Pensions Ombudsman (PO).

**The CISRS** is a defined benefit type of scheme and provides a supplementary earnings-dependent pension.

[2256] Whitehouse E. (2007), p. 120.
[2257] Mattil B. (2006), p. 103.
[2258] In the fiscal year 2004/2005, the maximum SERPS pension for a single person was £140.44.
[2259] In the fiscal year 2004/2005, the maximum GRS pension was £8.28 for men and £6.94 for women.
[2260] Blake D. (2002), p. 319.
[2261] Carter K. (2004).
[2262] In the fiscal year 2007/2008, this limit is £225,000 annually and £1.6 million during the whole life-cycle. In the fiscal year 2008/2009, it will be £235,000 annually and £1.65 million during the whole life; the ultimate annual of £255,000 and £1.8 million during the whole life will be reached in 2010/2011. Cf.: http://www.hmrc.gov.uk/rates/pensions.htm, accessed 11 February 2008.
[2263] *The Handbook of Western European Pension Politics* (2007), p. 857.

**The CIMPS** is a defined contribution type of scheme and provides additional pension that depends on the return on investment of accrued contributions.

**The COSRS** is a scheme in which the employer assumes obligation to provide the employee in the future with an income which will at least match this offered by the S2P. In this scheme, the pension is computed by multiplying the average income of the last three years before the retirement date by the number of years in employment (but not more than 40) and dividing the obtained figure by 80[2264]. The maximum replacement rate is 50%, which takes place when the number of years in employment is at least 40. After 1 April each year, the entitlement is valorised with the inflation index, but not more than 2.5%[2265].

**The COMPS** is a scheme in which the employer takes on the obligation to pay contributions at least equal to the alleviation in the S2P contributions

. **The COMBS** is a solution that combines requirements included in the COSRS and the COMPS, though participating employees have to choose between the COSRS and the COMPS[2266].

**The COHS** provides additional occupational pensions, applying a combination of wages-related and investment-related elements.

**Additional private sector pension** may take one of the four forms: 1) personal pension scheme (PPS), 2) group personal pension scheme (GPPS), 3) stakeholder pension scheme (SPS), and 4) individual savings accounts (ISA). All these varieties are handled by institutions that are external to the employing company and invest in capital markets. The contributions paid by employees up to a certain level are not subject to income tax, and those paid by employers constitute their tax deductible expenses[2267]. 25% of capital collected by an employee in such a scheme

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2264 Schulze I., Moran M. (2007b), p. 66.

2265 *The Handbook of Western European Pension Politics* (2007), p. 858.

2266 Mattil B. (2006), p. 236.

2267 In the fiscal year 2007/2008, this limit is £225,000 annually and £1.6 million during the whole life. In the fiscal year 2008/2009 it will be £235,000 annually and £1.65

may be paid out as a lump sum at the retirement date without having to pay the income tax. Supervision over these schemes is performed by the Personal Investment Authority (PIA).

**The PPS** consists of two elements: a) the appropriate PPS, which provides pensions replacing the S2P, and b) a supplementary scheme, connected with payment of extra contributions up to the level of Inland Revenue[2268].

**The GPPS** are preferred by small businesses that employ just a few people.

**The SPS** has been designed for employees of smaller companies who allocate part of their capital to their pension income.

**The ISAs** are used by families for accumulating capital for their old-age income. Decisions in this respect vary from household to household.

### 2.27.4 Challenges and planned changes in the pension system in the United Kingdom

The main challenge to the British pension system is how to provide decent old-age income without negative consequences to public finances. In the period of 2010-2020, the retirement age for women will be gradually increased up to 65[2269]. In the longer perspective, the retirement age will be increased up to 68 years of age for both sexes in 2046[2270]. From 2010 there will be no limitation on postponing retirement[2271], and the minimum age required for qualification for the pension credit will be systematically increased to the level of 65, alongside with the increase of the retirement age for women[2272]. Also, changes are foreseen in the share of public and

million during the whole life; the ultimate level of £255,000 annually and £1.8 million during the whole life will be reached in 2010/2011. Cf.: http://www.hmrc.gov.uk/rates/pensions.htm, accessed 11 February 2008.

2268 This was equal to £3,600 annually. Cf.: http://www.hmrc.gov.uk/rates/pensions.htm, accessed 11 February 2008.

2269 Blundell R., Meghir C. and Smith S. (2004), p. 645.

2270 *Joint Report on Social Protection and Social Inclusion 2007. Social Inclusion, Pensions, Healthcare and Long Term Care* (2007), p. 404.

2271 Żukowski M. (2004), p. 317.

2272 *Social Security Programs Throughout the World: Europe, 2006* (2006), p. 330.

private schemes in retirement provision in general: it is expected that the proportion of involvement of these two types of systems in 2050 will be 40/60[2273]. In the study published by HM Government in 2005, the following issues are highlighted as the most challenging[2274]:

- to alleviate poverty of the elderly,
- to provide a universal possibility to create old-age income,
- to protect economic stability of the country,
- to create fair retirement possibilities for women and carers,
- to make the pension reform understandable for the general public,
- to find the possible broadest consensus for the reform.

As far as incoming systemic changes are concerned, the NPSS is due to be implemented in 2012 in order to replace the existing state pensions. At the same time, the minimum participation period for pension entitlement will be reduced to 30 years for both sexes[2275]. It is also likely that institutional integration of a number of supervisory institutions will take place; the mergers of the TPR and the PPF, the FSA and the TPR, as well as the PO and the FOS are already being discussed[2276].

### 2.27.5 Summary

Though based on the Beveridge's idea of the 1940s, the British pension system has been subject to significant changes in the recent time, they did not go into the core of the system. The only systemic novelty was the creation of gradable pensions, then replaced by the SERPS, and finally transformed into the S2P. Occupational pension schemes, important to the British pension system, underwent only cosmetic changes. The first change that could be named systemic will take place in 2012, when the NSSP will provide for individual accounting of contributions paid. Despite international comparisons showing that until recently the British pension

[2273] Mattil B. (2006), p. 92.
[2274] *United Kingdom National Strategy Report on Adequate and Sustainable pensions: An update to the European Commission on the UK's progress since 2002* (2005), p. 7.
[2275] http://www.dwp.gov.uk/pensionsreform, accessed 10 February 2008.
[2276] Thornton P. (2007), p. 18.

system performed well[2277], it is more and more voiced that the British state old-age income provision is inadequate[2278] and occupational pension schemes are unreliable, especially after a series of corporate bankruptcies in the first years of the 21st c.[2279].

In the international perspective, the Pension Ombudsman as an institutional representation of the interests of the retired is a noteworthy solution.

[2277] *UK State Pension Scheme Among Best Placed in Expanded EU* (2004).
[2278] *State pension `worst in Europe´* (2007).
[2279] Cohen N. (2005).

# Chapter III
# EUROPEAN PENSION SYSTEMS

The presentation of pension systems in 27 European Union countries, contained in previous chapter, triggers the attempt to summarize its contents. In the following chapter the Author presents a comparative analysis of European pension systems and conducts a critical analysis of elements that distinguish particular pension systems. The *Resumé* constitutes an attempt to synthesise the previous contents.

## 3.1 THE CONDITIONS OF EUROPEAN PENSION SYSTEMS OPERATING

### 3.1.1 Economic potential

At the beginning of the analysis of European pension systems one should take into account the wealth and the economic potential of particular European Union countries. The rate of the GDP *per capita* (PPP) was adopted as the rate of wealth, and the rate of the total GDP in particular countries was adopted as the rate of their economic potential. Based on the data on the GDP *per capita* (PPP) used in the previous chapter and the size of population in particular countries, the rate of their economic potential was determined. Next, the European countries were listed in a descending order. The complete comparison is presented in **Tables no. 1** and **no. 2**.

**Table no. 1**

**GDP *per capita* (PPP) and the total GDP in 2007**

| No. | Country | GDP *per capita* (US$) | Population | GDP (US$) |
|---|---|---|---|---|
| 1 | Luxembourg | 80,800 | 480,222 | 38,801,937,600 |
| 2 | Ireland | 45,600 | 4,109,086 | 187,374,321,600 |
| 3 | Austria | 39,000 | 8,199,783 | 319,791,537,000 |
| 4 | the Netherlands | 38,600 | 16,570,613 | 639,625,661,800 |

| | | | | |
|---|---|---|---|---|
| 5 | Denmark | 37,400 | 5,468,120 | 204,507,688,000 |
| 6 | Sweden | 36,900 | 9,031,088 | 333,247,147,200 |
| 7 | Belgium | 36,500 | 10,392,226 | 379,316,249,000 |
| 8 | Finland | 35,500 | 5,238,460 | 185,965,330,000 |
| 9 | the United Kingdom | 35,300 | 60,776,238 | 2,145,401,201,400 |
| 10 | Germany | 34,400 | 82,400,996 | 2,834,594,262,400 |
| 11 | France | 33,800 | 63,718,187 | 2,153,674,720,600 |
| 12 | Spain | 33,700 | 40,448,191 | 1,363,104,036,700 |
| 13 | Italy | 31,000 | 58,147,733 | 1,802,579,723,000 |
| 14 | Greece | 30,500 | 10,706,290 | 326,541,845,000 |
| | **Total:** | **30,320** | **490,430,321** | **14,869,733,474,600** |
| 15 | Slovenia | 27,300 | 2,009,245 | 54,852,388,500 |
| 16 | Cyprus | 27,100 | 788,457 | 21,367,184,700 |
| 17 | the Czech Republic | 24,400 | 10,228,744 | 249,581,353,600 |
| 18 | Malta | 23,200 | 401,880 | 9,323,616,000 |
| 19 | Portugal | 21,800 | 10,642,836 | 232,013,824,800 |
| 20 | Estonia | 21,800 | 1,315,912 | 28,686,881,600 |
| 21 | Slovakia | 19,800 | 5,447,502 | 107,860,539,600 |
| 22 | Hungary | 19,500 | 9,956,108 | 194,144,106,000 |
| 23 | Latvia | 17,700 | 2,259,810 | 39,998,637,000 |
| 24 | Lithuania | 16,700 | 3,575,439 | 59,709,831,300 |
| 25 | Poland | 16,200 | 38,518,241 | 623,995,504,200 |
| 26 | Bulgaria | 11,800 | 7,322,858 | 86,409,724,400 |
| 27 | Romania | 11,100 | 22,276,056 | 247,264,221,600 |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31 March 2008.

The analysis of data contained in **Table no. 1** indicates that the average rate of the GDP *per capita* (PPP) amounts to US$30,320. The richest countries at the end of 2007 were Luxembourg, Ireland and Austria. The poorest countries were Romania, Bulgaria and Poland. The GDP *per capita* (PPP) in Luxembourg made up 266.49% of the average value and 727.93% of the lowest value, which was recorded in Romania. The rate of the GDP *per capita* (PPP) in Romania amounted to 36.61% of the average value and 13.74% of the highest value, which was recorded in Luxembourg. Out of the countries constituting the European Economic Community in 1957, the highest rate of the GDP *per capita* (PPP) was in Luxembourg and the lowest one in Italy. However, even the GDP *per capita* (PPP) in Italy, which amounted to US$31,000, was higher than the average value for the whole European Union. Out of the countries which joined the European Community between 1973 and 1995, Ireland was the richest country and Portugal was the poorest one. The rate of the GDP *per capita* (PPP) in Portugal, amounting to US$21,800, was lower than the average value. Portugal was the only country in that group in which the rate of the GDP *per capita* (PPP) was lower than the average. Out of the countries which joined the European Union in 2004, Slovenia was the wealthiest country and Poland was the poorest one. However, even in the case of Slovenia the rate of the GDP *per capita* (PPP), which accounted for US$27,300, was lower than the average value for the whole European Union. Out of the two countries which joined the European Union in 2007, Bulgaria was a richer country and Romania was a poorer one. Both those countries were, at the same time, the poorest countries in the European Union.

**Table no. 2**

**Total GDP in 2007**

| No. | Country | GDP in (US$) |
|---|---|---|
| 1 | Germany | 2,834,594,262,400 |
| 2 | France | 2,153,674,720,600 |
| 3 | the United Kingdom | 2,145,401,201,400 |
| 4 | Italy | 1,802,579,723,000 |
| 5 | Spain | 1,363,104,036,700 |
| 6 | the Netherlands | 639,625,661,800 |
| 7 | Poland | 623,995,504,200 |
| 8 | Belgium | 379,316,249,000 |
| 9 | Sweden | 333,247,147,200 |
| 10 | Greece | 326,541,845,000 |
| 11 | Austria | 319,791,537,000 |
| 12 | the Czech Republic | 249,581,353,600 |

| | | |
|---|---|---|
| 13 | Romania | 247,264,221,600 |
| 14 | Portugal | 232,013,824,800 |
| 15 | Denmark | 204,507,688,000 |
| 16 | Hungary | 194,144,106,000 |
| 17 | Ireland | 187,374,321,600 |
| 18 | Finland | 185,965,330,000 |
| 19 | Slovakia | 107,860,539,600 |
| 20 | Bulgaria | 86,409,724,400 |
| 21 | Lithuania | 59,709,831,300 |
| 22 | Slovenia | 54,852,388,500 |
| 23 | Latvia | 39,998,637,000 |
| 24 | Luxembourg | 38,801,937,600 |
| 25 | Estonia | 28,686,881,600 |
| 26 | Cyprus | 21,367,184,700 |
| 27 | Malta | 9,323,616,000 |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31March 2008.

The data contained in **Table no. 2** indicate the level of economies in particular countries of the European Union. In 2007 Germany had the biggest economy and Malta had the smallest one. The total GDP rate in Germany amounted to 19.06% of the whole EU economy and the total GDP rate in Malta was estimated at 0.06%. The German economy amounted to 30,402.31% of the Maltese economy and the Maltese economy made up 0.33% of the German economy. At the end of 2007, Germany had the biggest economy among the countries which constituted the European Economic Community in 1957. Out of those countries, Luxembourg had the lowest total GDP. Among the countries which joined the European Community between 1973 and 1995, the UK had the biggest economy and Finland had the smallest one at the end of 2007. Out of the countries which joined the European Union in 2004, Poland had the biggest economy and Malta had the smallest one at the end of 2007. Out of the two countries which joined the European Union in 2007, Romania had the bigger economy and Bulgaria had the smaller one.

The GDP growth is essential to estimate the changes in the economic potential. The complete list of the GDP growth is contained in **Table no. 3**.

**Table no. 3**

**GDP growth in 2007**

| No. | Country | GDP growth |
|---|---|---|
| 1 | Latvia | 10.30% |
| 2 | Slovakia | 8.80% |
| 3 | Lithuania | 8.00% |
| 4 | Estonia | 7.90% |
| 5 | Poland | 6.50% |
| 6 | Bulgaria | 6.10% |
| 7 | Romania | 5.90% |
| 8 | the Czech Republic | 5.70% |
| 9 | Slovenia | 5.60% |
| 10 | Ireland | 5.30% |
| 11 | Luxembourg | 5.00% |
| 12 | Finland | 3.90% |
| 13 | Cyprus | 3.90% |
| 14 | Spain | 3.80% |
| 15 | Greece | 3.70% |
| 16 | Sweden | 3.40% |
| 17 | Malta | 3.40% |
| 18 | Austria | 3.30% |
| 19 | the United Kingdom | 2.90% |
| 20 | the Netherlands | 2.80% |
| 21 | Belgium | 2.70% |
| 22 | Germany | 2.60% |
| 23 | Hungary | 2.10% |
| 24 | Italy | 1.90% |
| 25 | France | 1.80% |
| 26 | Portugal | 1.70% |
| 27 | Denmark | 1.70% |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31March 2008.

The highest rate of the GDP growth was noted in Latvia and the lowest one was noted in Denmark. The rate of the GDP growth in Latvia made up 605.88% of the Danish rate and the rate of the GDP growth in Denmark amounted to 16.50% of the GDP growth in Latvia. Among the member countries of the European Economic Community in 1957, Luxembourg had the highest rate of the GDP growth and France had the lowest one in 2007. It is worth noticing that out of the founding countries, except for Luxembourg, the remaining 5 countries ranked between 20 and 25 . Among the countries which joined the European Community between 1973 and 1995, Ireland had the highest rate of the GDP growth and Denmark had the lowest one at the end of 2007. Among the countries which joined the European Union in 2004, Latvia had the highest rate of the GDP growth and Hungary had the lowest one at the end of 2007. It is worth noticing that the countries of that group occupied the first 5 positions in that ranking. Among the countries that joined the European Union in 2007, the rate of the GDP growth was similar but a bit higher in Bulgaria.

An attempted simulation of the potential economic growth in the European Union countries within the next years is contained in **Table no. 4**.

**Table no. 4**

**Total GDP in 2010 – a simulation**

| No. | Country | GDP (US$) |
|---|---|---|
| 1 | Germany | 3,061,490,992,860 |
| 2 | the United Kingdom | 2,337,516,277,343 |
| 3 | France | 2,272,079,087,572 |
| 4 | Italy | 1,907,291,324,945 |
| 5 | Spain | 1,524,477,659,815 |
| 6 | Poland | 753,755,135,300 |
| 7 | the Netherlands | 694,872,658,010 |
| 8 | Belgium | 410,877,895,887 |
| 9 | Sweden | 368,407,155,267 |

| | | |
|---|---|---|
| 10 | Greece | 364,145,637,476 |
| 11 | Austria | 352,507,150,463 |
| 12 | the Czech Republic | 294,738,655,239 |
| 13 | Romania | 293,662,951,968 |
| 14 | Portugal | 244,048,825,735 |
| 15 | Ireland | 218,773,737,869 |
| 16 | Denmark | 215,115,893,000 |
| 17 | Finland | 208,582,864,688 |
| 18 | Hungary | 206,633,835,299 |
| 19 | Slovakia | 138,915,042,048 |
| 20 | Bulgaria | 103,206,909,084 |
| 21 | Lithuania | 75,217,191,007 |
| 22 | Slovenia | 64,593,273,996 |
| 23 | Latvia | 53,674,960,043 |
| 24 | Luxembourg | 44,918,093,014 |
| 25 | Estonia | 36,036,920,775 |
| 26 | Cyprus | 23,965,911,254 |
| 27 | Malta | 10,307,325,588 |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31March 2008.

The total GDP value in particular countries contained in the table above is based on the assumption that between 2008 and 2010 the rate of the GDP growth is maintained at the same rate as in 2007. The changes in positions of particular EU countries in their rating of economic potential, provided the above-mentioned provision is maintained, are slight. Germany will remain the biggest EU economy and Malta will be the smallest one. The upward trend may concern only 4 countries: the UK may overtake France and become the second largest EU economy after Germany, Poland may overtake the Netherlands, Ireland may overtake Denmark and Hungary, and Hungary may be overtaken by Finland.

Another important factor which characterizes the economic potential of particular countries is the unemployment rate, whose value in 2007 is presented in **Table no. 5**.

**Table no. 5**

**Unemployment rate in the European Union countries in 2007**

| No. | Country | Unemployment rate |
|---|---|---|
| 1 | Poland | 12.8% |
| 2 | Germany | 9.1% |
| 3 | Slovakia | 8.6% |
| 4 | Greece | 8.4% |
| 5 | France | 8.0% |
| 6 | Portugal | 8.0% |
| 7 | Bulgaria | 8.0% |
| 8 | Spain | 7.6% |
| 9 | Belgium | 7.6% |
| 10 | Hungary | 7.1% |
| 11 | Malta | 6.8% |
| 12 | Italy | 6.7% |
| 13 | Finland | 6.6% |
| 14 | the Czech Republic | 6.6% |
| 15 | Latvia | 5.9% |
| 16 | the United Kingdom | 5.4% |
| 17 | Estonia | 5.2% |
| 18 | Ireland | 5.0% |
| 19 | Slovenia | 4.6% |
| 20 | Romania | 4.5% |
| 21 | the Netherlands | 4.5% |
| 22 | Sweden | 4.5% |
| 23 | Luxmburg | 4.4% |
| 24 | Austria | 4.3% |
| 25 | Cyprus | 3.8% |
| 26 | Denmark | 3.5% |
| 27 | Lithuania | 3.2% |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31 March 2008.

In 2007 the highest unemployment rate was in Poland and the lowest one was in Lithuania. The difference between the unemployment rate in Poland and in Lithuania amounted to 9.6%. Three countries with the highest unemployment rate were Poland, Germany and Slovakia. The lowest unemployment rate was in Lithuania, Denmark and Cyprus. Among the EEC countries in 1957, the highest unemployment rate was in Germany and the lowest one in Luxembourg at the end of 2007. Out of the countries which joined the European Community between 1973 and 1995, Greece had the highest unemployment rate and Denmark the lowest one at the end of 2007. Among the countries which joined the European Union in 2004, Poland had the highest unemployment rate and Lithuania had the lowest one at the end of 2007. Among the countries which joined the European Union in 2007, Bulgaria had a much higher unemployment rate at the end of 2007.

### 3.1.2 Demography

A demographic situation plays an important role for pension systems, especially for those which are based on the so-called trans-generational solidarity. The size of populations in particular EU countries in July 2007 is contained in **Table no. 6**.

**Table no. 6**

**The population in European Union countries – July 2007**

| No. | Country | Population |
|---|---|---|
| 1 | Germany | 82,400,996 |
| 2 | France | 63,718,187 |
| 3 | the United Kingdom | 60,776,238 |
| 4 | Italy | 58,147,733 |
| 5 | Spain | 40,448,191 |
| 6 | Poland | 38,518,241 |
| 7 | Romania | 22,276,056 |
| 8 | the Netherlands | 16,570,613 |
| 9 | Greece | 10,706,290 |

| | | |
|---|---|---|
| 10 | Portugal | 10,642,836 |
| 11 | Belgium | 10,392,226 |
| 12 | the Czech Republic | 10,228,744 |
| 13 | Hungary | 9,956,108 |
| 14 | Sweden | 9,031,088 |
| 15 | Austria | 8,199,783 |
| 16 | Bulgaria | 7,322,858 |
| 17 | Denmark | 5,468,120 |
| 18 | Slovakia | 5,447,502 |
| 19 | Finland | 5,238,460 |
| 20 | Ireland | 4,109,086 |
| 21 | Lithuania | 3,575,439 |
| 22 | Latvia | 2,259,810 |
| 23 | Slovenia | 2,009,245 |
| 24 | Estonia | 1,315,912 |
| 25 | Cyprus | 788,457 |
| 26 | Luxembourg | 480,222 |
| 27 | Malta | 401,880 |
| | **Total:** | **490,430,321** |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31March 2008.

In 2007 the European Union had the total population of 490 million people. Germany, France and the UK were the three countries with the biggest of population and Malta, Luxembourg and Cyprus were the countries with the smallest population. The population in the largest country, i.e. Germany, amounted to 16.80% of the total population in the European Union countries, and the population of the smallest country, i.e. Malta, accounted for 0.08% of the total population. The population of Germany made up 20,503.88% of the population in Malta and the population of Malta constituted 0.49% of the population in Germany. Among the EEC countries in 1957, Germany had the largest population and Luxembourg had the smallest one in July 2007. Among the countries which joined the European Community between 1973 and 1995, the UK had the biggest population and Ireland had the smallest one in July 2007. Out of the countries which joined the European Union in 2004, Poland had the biggest population and Malta had the smallest one in July 2007. Among the countries which joined the European Union in 2007, Romania had a larger population.

For pension systems, the most important issue in the demographic area is the number of people at the age of 65 and over. It is presented in **Table no. 7**, which is based on the data on the number of population and the percentage of people aged 65+ in the total population.

**Table no. 7**

**The number of those aged 65+ in the European Union countries in July 2007**

| No. | Country | Population | % of population aged 65+ | Number of population aged 65+ |
|---|---|---|---|---|
| 1 | Germany | 82,400,996 | 19.8% | 16,315,397 |
| 2 | Italy | 58,147,733 | 19.9% | 11,571,399 |
| 3 | France | 63,718,187 | 16.2% | 10,322,346 |
| 4 | the United Kingdom | 60,776,238 | 15.8% | 9,602,646 |
| 5 | Spain | 40,448,191 | 17.8% | 7,199,778 |
| 6 | Poland | 38,518,241 | 13.3% | 5,122,926 |
| 7 | Romania | 22,276,056 | 14.7% | 3,274,580 |
| 8 | the Netherlands | 16,570,613 | 14.4% | 2,386,168 |
| 9 | Greece | 10,706,290 | 19.0% | 2,034,195 |
| 10 | Portugal | 10,642,836 | 17.3% | 1,841,211 |
| 11 | Belgium | 10,392,226 | 17.4% | 1,808,247 |
| 12 | Sweden | 9,031,088 | 17.9% | 1,616,565 |
| 13 | Hungary | 9,956,108 | 15.4% | 1,533,241 |
| 14 | the Czech Republic | 10,228,744 | 14.7% | 1,503,625 |
| 15 | Austria | 8,199,783 | 17.5% | 1,434,962 |
| 16 | Bulgaria | 7,322,858 | 17.4% | 1,274,177 |
| 17 | Finland | 5,238,460 | 16.4% | 859,107 |
| 18 | Denmark | 5,468,120 | 15.4% | 842,090 |
| 19 | Slovakia | 5,447,502 | 12.2% | 664,595 |
| 20 | Lithuania | 3,575,439 | 15.8% | 564,919 |

| | | | | |
|---|---|---|---|---|
| 21 | Ireland | 4,109,086 | 11.7% | 480,763 |
| 22 | Latvia | 2,259,810 | 16.7% | 377,388 |
| 23 | Slovenia | 2,009,245 | 16.0% | 321,479 |
| 24 | Estonia | 1,315,912 | 17.5% | 230,285 |
| 25 | Cyprus | 788,457 | 11.8% | 93,038 |
| 26 | Luxembourg | 480,222 | 14.7% | 70,593 |
| 27 | Malta | 401,880 | 13.8% | 55,459 |
| | **Total:** | **490,430,321** | **17.0%** | **83,401,181** |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31 March 2008.

In all the European Union countries there were 83 million people aged 65+. Germany had the highest number of those aged 65+ in absolute values, and Malta the lowest number. The position of those countries was relevant to their position in the total population survey. Germany, Italy and France had the highest number of those aged 65+. The higher position of Italy than in the survey of the total population resulted from the highest number of those aged 65+ in the whole European Union. The lowest number of people aged 65+ was in Malta, Luxembourg and Cyprus, which was relevant to the position of those countries in the survey on total population. Among the member countries of the European Economic Community in 1957, Germany had the highest number of those aged 65+ in July 2007, which was in relevance with the survey on total population, and Luxembourg had the lowest one. Among the countries which joined the European Community between 1973 and 1995, the UK had the highest number of inhabitants aged 65+ and Ireland had the lowest one in July 2007, which was also relevant to the survey on total population. Among the countries which joined the European Union in 2004, Poland had the largest population of those aged 65+ and Malta had the smallest one in July 2007. Out of the countries which joined the European Union in 2007, Romania had a higher number of people aged 65+.

Beside the absolute values, the percentage of those at the retirement age in the total population is also essential. The results of the survey concerning this factor are shown in **Table no. 8**.

**Table no. 8**

**The percentage of those aged 65+ in the population in the European Union countries**

| No. | Country | % of those aged 65+ in the population |
|---|---|---|
| 1 | Italy | 19.9% |
| 2 | Germany | 19.8% |
| 3 | Greece | 19.0% |
| 4 | Sweden | 17.9% |
| 5 | Spain | 17.8% |
| 6 | Austria | 17.5% |
| 7 | Estonia | 17.5% |
| 8 | Belgium | 17.4% |
| 9 | Bulgaria | 17.4% |
| 10 | Portugal | 17.3% |
| | **Total:** | **17.0%** |
| 11 | Latvia | 16.7% |
| 12 | Finland | 16.4% |
| 13 | France | 16.2% |
| 14 | Slovenia | 16.0% |
| 15 | the United Kingdom | 15.8% |
| 16 | Lithuania | 15.8% |
| 17 | Hungary | 15.4% |
| 18 | Denmark | 15.4% |
| 19 | Romania | 14.7% |
| 20 | the Czech Republic | 14.7% |
| 21 | Luxembourg | 14.7% |
| 22 | the Netherlands | 14.4% |
| 23 | Malta | 13.8% |
| 24 | Poland | 13.3% |
| 25 | Slovakia | 12.2% |
| 26 | Cyprus | 11.8% |
| 27 | Ireland | 11.7% |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31 March 2008.

The percentage of people aged 65+ in population indicates best how that population is burdened with the maintenance of those at the retirement age. Italy had the highest percentage of people aged 65+ in the population, which amounted to 19.9%, and Ireland had the lowest one, which was estimated at 11.7%. The average value for the whole European Union accounted for 17.0%. Italy, Germany and Greece were characterized with the highest number. In all those countries the percentage of inhabitants aged 65+ was equal to 19% and more, which proves that the pension systems in those countries are really burdened. Ireland, Cyprus and Slovakia were characterized by the lowest numbers. In all those countries the percentage of people aged 65+ was estimated at about 12%.

Another important demographic aspect is life expectancy. It is essential for actuarial calculation of pensions. The classification of life expectancy at birth in the European Union countries is presented in **Table no. 9**.

**Table no. 9**

**Life expectancy at birth in the European Union countries in 2007**

| No. | Country | Women | Men | Total |
|---|---|---|---|---|
| 1 | Sweden | 83.00 | 78.39 | 80.63 |
| 2 | France | 84.00 | 77.35 | 80.59 |
| 3 | Italy | 83.07 | 77.01 | 79.94 |
| 4 | Spain | 83.32 | 76.46 | 79.78 |
| 5 | Greece | 82.06 | 76.85 | 79.38 |
| 6 | Austria | 82.26 | 76.32 | 79.21 |
| 7 | Malta | 81.47 | 76.95 | 79.15 |
| 8 | the Netherlands | 81.82 | 76.52 | 79.11 |
| 9 | Luxembourg | 82.52 | 75.76 | 79.03 |
| 10 | Germany | 82.11 | 75.96 | 78.95 |
| 11 | Belgium | 82.24 | 75.75 | 78.92 |
| 12 | the United Kingdom | 81.30 | 76.23 | 78.70 |
| 13 | Finland | 82.31 | 75.15 | 78.66 |

| | | | | |
|---|---|---|---|---|
| 14 | Cyprus | 80.49 | 75.60 | 77.98 |
| 15 | Denmark | 80.41 | 75.65 | 77.96 |
| 16 | Ireland | 80.70 | 75.27 | 77.90 |
| 17 | Portugal | 81.36 | 74.60 | 77.87 |
| 18 | the Czech Republic | 79.88 | 73.14 | 76.42 |
| 19 | Slovenia | 80.47 | 72.84 | 76.53 |
| 20 | Poland | 79.44 | 71.18 | 75.19 |
| 21 | Slovakia | 79.11 | 71.00 | 74.95 |
| 22 | Lithuania | 79.69 | 69.46 | 74.44 |
| 23 | Hungary | 77.38 | 68.73 | 72.92 |
| 24 | Bulgaria | 76.40 | 68.95 | 72.57 |
| 25 | Estonia | 78.07 | 66.87 | 72.30 |
| 26 | Romania | 75.62 | 68.41 | 71.91 |
| 27 | Latvia | 77.10 | 66.39 | 71.60 |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31 March 2008.

Sweden had the longest life expectancy and Latvia had the shortest one, and the difference between those countries amounted to 9.03 years. Sweden, France and Italy enjoyed the longest life expectancy, while Latvia, Romania and Estonia were characterized by the shortest one. There is a clear discrepancy of life expectancy between men and women, with that of women being longer than that of men. Women lived longest in France and shortest in Romania, and the difference between those countries amounted to 7.38 years. Men lived longest in Sweden and shortest in Latvia, with a 12-year difference. The discrepancy between the life expectancy for women in France and men in Latvia was estimated at 17.61 years.

The differentiation in life expectancy between genders plays an important role while creating pension systems. From the actuarial point of view, it influences the differentiation of retirement age between genders. The differences of life expectancy between genders in the European Union countries appear in **Table no. 10**.

**Table no. 10**

**The difference in life expectancy at birth between genders in the European Union countries in 2007**

| No. | Country | Women | Men | Difference |
|---|---|---|---|---|
| 1 | Estonia | 78.07 | 66.87 | 11.20 |
| 2 | Latvia | 77.10 | 66.39 | 10.71 |
| 3 | Lithuania | 79.69 | 69.46 | 10.23 |
| 4 | Hungary | 77.38 | 68.73 | 8.65 |
| 5 | Poland | 79.44 | 71.18 | 8.26 |
| 6 | Slovakia | 79.11 | 71.00 | 8.11 |
| 7 | Slovenia | 80.47 | 72.84 | 7.63 |
| 8 | Bulgaria | 76.40 | 68.95 | 7.45 |
| 9 | Romania | 75.62 | 68.41 | 7.21 |
| 10 | Finland | 82.31 | 75.15 | 7.16 |
| 11 | Spain | 83.32 | 76.46 | 6.86 |
| 12 | Luxembourg | 82.52 | 75.76 | 6.76 |
| 13 | Portugal | 81.36 | 74.60 | 6.76 |
| 14 | the Czech Republic | 79.88 | 73.14 | 6.74 |
| 15 | France | 84.00 | 77.35 | 6.65 |
| 16 | Belgium | 82.24 | 75.75 | 6.49 |
| 17 | Germany | 82.11 | 75.96 | 6.15 |
| 18 | Italy | 83.07 | 77.01 | 6.06 |
| 19 | Austria | 82.26 | 76.32 | 5.94 |
| 20 | Ireland | 80.70 | 75.27 | 5.43 |
| 21 | the Netherlands | 81.82 | 76.52 | 5.30 |
| 22 | Greece | 82.06 | 76.85 | 5.21 |
| 23 | the United Kingdom | 81.30 | 76.23 | 5.07 |
| 24 | Cyprus | 80.49 | 75.60 | 4.89 |
| 25 | Denmark | 80.41 | 75.65 | 4.76 |
| 26 | Sweden | 83.00 | 78.39 | 4.61 |
| 27 | Malta | 81.47 | 76.95 | 4.52 |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31 March 2008.

In every country women lived longer than men. The largest difference in life expectancy between genders was in Estonia and the smallest one in Malta. The difference between those countries amounted to 6.68 years. It is most difficult for the countries with the biggest spread in life expectancy between genders to create pension systems, and it is much easier to do it for the countries with the smallest difference in that area. Three Baltic countries – Estonia, Latvia and Lithuania – have the largest difference in life expectancy. For Malta, Sweden and Denmark that difference is the smallest.

The percentage of population at working age also plays an important role for current unfunded pension systems. The number of people at working age in the particular European Union countries is shown in **Table no. 11**.

**Table no. 11**

**The number of people aged 15-64 in the European Union countries in July 2007**

| No. | Country | Population | % of people aged 15-64 | Number of people aged 15-64 |
|---|---|---|---|---|
| 1 | Germany | 82,400,996 | 66.3% | 54,631,860 |
| 2 | France | 63,718,187 | 65.2% | 41,544,258 |
| 3 | the United Kingdom | 60,776,238 | 67.0% | 40,720,079 |
| 4 | Italy | 58,147,733 | 66.4% | 38,610,095 |
| 5 | Spain | 40,448,191 | 67.8% | 27,423,873 |
| 6 | Poland | 38,518,241 | 71.1% | 27,386,469 |
| 7 | Romania | 22,276,056 | 69.6% | 15,504,135 |
| 8 | the Netherlands | 16,570,613 | 67.8% | 11,234,876 |
| 9 | the Czech Republic | 10,228,744 | 71.2% | 7,282,866 |
| 10 | Greece | 10,706,290 | 66.7% | 7,141,095 |
| 11 | Portugal | 10,642,836 | 66.3% | 7,056,200 |
| 12 | Hungary | 9,956,108 | 69.3% | 6,899,583 |
| 13 | Belgium | 10,392,226 | 66.1% | 6,869,261 |
| 14 | Sweden | 9,031,088 | 65.7% | 5,933,425 |
| 15 | Austria | 8,199,783 | 67.5% | 5,534,854 |

| | | | | |
|---|---|---|---|---|
| 16 | Bulgaria | 7,322,858 | 68.7% | 5,030,803 |
| 17 | Slovakia | 5,447,502 | 71.5% | 3,894,964 |
| 18 | Denmark | 5,468,120 | 66.0% | 3,608,959 |
| 19 | Finland | 5,238,460 | 66.7% | 3,494,053 |
| 20 | Ireland | 4,109,086 | 67.5% | 2,773,633 |
| 21 | Lithuania | 3,575,439 | 69.3% | 2,477,779 |
| 22 | Latvia | 2,259,810 | 69.6% | 1,572,828 |
| 23 | Slovenia | 2,009,245 | 70.3% | 1,412,499 |
| 24 | Estonia | 1,315,912 | 67.5% | 888,241 |
| 25 | Cyprus | 788,457 | 68.3% | 538,516 |
| 26 | Luxembourg | 480,222 | 66.6% | 319,828 |
| 27 | Malta | 401,880 | 69.5% | 279,307 |
| | **Total:** | **490,430,321** | **67.3%** | **330,064,340** |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31 March 2008.

There were over 330 million people aged 15-64 in all the EU countries. In absolute values, Germany had the highest number of people aged 15-64 and Malta had the lowest one. Their position was relevant to their positions in the survey on total population. Germany, France and the UK had the highest number of people aged 15-64, while Malta, Luxembourg and Cyprus had the lowest, which was relevant to the position of those countries in the survey on total population. Among the countries of the European Economic Community in 1957, in July 2007 Germany had the highest number of those aged 15-64, and Luxembourg had the lowest one, which was related to the survey on total population. Among the countries which joined the European Community between 1973 and 1995, in July 2007 the UK had the highest number of inhabitants aged 15-64, and Ireland had the lowest one, which reflected their positions in the survey on the total population. Among the countries which joined the European Union in 2004, Poland had the highest number of people aged 15-64 and Malta had the lowest one in July 2007. Among the countries which joined the European Union in 2007, Romania had the highest number of those aged 15-64 in 2007.

The real number of inhabitants participating in the profits of unfunded pension systems also depends on the unemployment rate in particular countries. The number of the unemployed inhabitants in the European Union countries, based on the number of people at working age and the unemployment rate, is shown in **Table no. 12**.

**Table no. 12**

**The number of the unemployed in the European Union countries in 2007**

| No. | Country | The number of those aged 15-64 | Unemployment rate | The number of the unem-ployed |
|---|---|---|---|---|
| 1 | Germany | 54,631,860 | 9.1% | 4,971,499 |
| 2 | Poland | 27,386,469 | 12.8% | 3,505,468 |
| 3 | France | 41,544,258 | 8.0% | 3,323,541 |
| 4 | Italy | 38,610,095 | 6.7% | 2,586,876 |
| 5 | the United Kingdom | 40,720,079 | 5.4% | 2,198,884 |
| 6 | Spain | 27,423,873 | 7.6% | 2,084,214 |
| 7 | Romania | 15,504,135 | 4.5% | 697,686 |
| 8 | Greece | 7,141,095 | 8.4% | 599,852 |
| 9 | Portugal | 7,056,200 | 8.0% | 564,496 |
| 10 | Belgium | 6,869,261 | 7.6% | 522,064 |
| 11 | the Netherlands | 11,234,876 | 4.5% | 505,569 |
| 12 | Hungary | 6,899,583 | 7.1% | 489,870 |
| 13 | the Czech Republic | 7,282,866 | 6.6% | 480,669 |
| 14 | Bulgaria | 5,030,803 | 8.0% | 402,464 |
| 15 | Slovakia | 3,894,964 | 8.6% | 334,967 |
| 16 | Sweden | 5,933,425 | 4.5% | 267,004 |
| 17 | Austria | 5,534,854 | 4.3% | 237,999 |
| 18 | Finland | 3,494,053 | 6.6% | 230,607 |
| 19 | Ireland | 2,773,633 | 5.0% | 138,682 |
| 20 | Denmark | 3,608,959 | 3.5% | 126,314 |
| 21 | Latvia | 1,572,828 | 5.9% | 92,797 |
| 22 | Lithuania | 2,477,779 | 3.2% | 79,289 |
| 23 | Slovenia | 1,412,499 | 4.6% | 64,975 |
| 24 | Estonia | 888,241 | 5.2% | 46,189 |
| 25 | Cyprus | 538,516 | 3.8% | 20,464 |

| | | | | |
|---|---|---|---|---|
| 26 | Malta | 279,307 | 6.8% | 18,993 |
| 27 | Luxembourg | 319,828 | 4.4% | 14,072 |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31 March 2008.

In absolute values, Germany had the highest number of unemployed people and Luxembourg had the lowest one. Germany, Poland and France had the highest number of the unemployed. Luxembourg, Malta and Cyprus had the lowest number. Among the countries constituting the European Economic Community in 1957, Germany had the highest number of unemployed inhabitants and Luxembourg had the lowest one in 2007. Among the countries which joined the European Community between 1973 and 1995, the UK had the highest number of unemployed people and Denmark had the lowest one in 2007. Among the countries which joined the European Union in 2004, Poland had the highest number of those unemployed, while Malta had the lowest one in 2007. Among the countries which joined the European Union in 2007, Romania had the higher number of the unemployed. Beside absolute values, the percentage of those at working age is also essential. **Table no. 13** contains the relevant data.

**Table no. 13**

**The percentage of population aged 15-64 in the European Union countries in July 2007**

| No. | Country | % of population aged 15-64 |
|---|---|---|
| 1 | Slovakia | 71.5% |
| 2 | the Czech Republic | 71.2% |
| 3 | Poland | 71.1% |
| 4 | Slovenia | 70.3% |
| 5 | Romania | 69.6% |
| 6 | Latvia | 69.6% |
| 7 | Malta | 69.5% |
| 8 | Hungary | 69.3% |

| | | |
|---|---|---|
| 9 | Lithuania | 69.3% |
| 10 | Bulgaria | 68.7% |
| 11 | Cyprus | 68.3% |
| 12 | Spain | 67.8% |
| 13 | the Netherlands | 67.8% |
| 14 | Austria | 67.5% |
| 15 | Ireland | 67.5% |
| 16 | Estonia | 67.5% |
| | **Total:** | **67.3%** |
| 17 | the United Kingdom | 67.0% |
| 18 | Greece | 66.7% |
| 19 | Finland | 66.7% |
| 20 | Luxembourg | 66.6% |
| 21 | Italy | 66.4% |
| 22 | Germany | 66.3% |
| 23 | Portugal | 66.3% |
| 24 | Belgium | 66.1% |
| 25 | Denmark | 66.0% |
| 26 | Sweden | 65.7% |
| 27 | France | 65.2% |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31 March 2008.

The percentage of those aged 15-64 in unfunded pension systems is the best reflection of the capability of a certain population to support people at retirement age. Slovakia had the highest number of people aged 15-64 in the population, which amounted to 71.5%, and France had the lowest one, which was estimated at 65.2%. The average number for the whole European Union was equal to 67.3%. Slovakia, the Czech Republic and Poland had the highest percentage. In all those countries, the percentage of those aged 15-64 was over 71%, which means that those countries have the highest demographic capability to finance the unfunded pension systems. France, Sweden and Denmark had the lowest. In all those countries, the number of inhabitants aged 16-64 accounted for no more than 66%, and compared to other countries, the smallest capability to finance the unfunded pension systems.

The best indicator whether unfunded pension systems are effectively financed is the ratio of the population at working age to the number of those at retirement age. That ratio in the European Union countries is presented in **Table no. 14**.

**Table no. 14**

**The ratio of the population aged 15-64 to the population aged 65+ in the European Union countries in July 2007**

| No. | Country | % of population aged 15-64 | % of population aged 65+ | The ratio of 15-64 to 65+ |
|---|---|---|---|---|
| 1 | Slovakia | 71.5% | 12.2% | 5.8607 |
| 2 | Cyprus | 68.3% | 11.8% | 5.7881 |
| 3 | Ireland | 67.5% | 11.7% | 5.7692 |
| 4 | Poland | 71.1% | 13.3% | 5.3459 |
| 5 | Malta | 69.5% | 13.8% | 5.0362 |
| 6 | the Czech Republic | 71.2% | 14.7% | 4.8435 |
| 7 | Romania | 69.6% | 14.7% | 4.7347 |
| 8 | the Netherlands | 67.8% | 14.4% | 4.7083 |
| 9 | Luxembourg | 66.6% | 14.7% | 4.5306 |
| 10 | Hungary | 69.3% | 15.4% | 4.5000 |
| 11 | Slovenia | 70.3% | 16.0% | 4.3938 |
| 12 | Lithuania | 69.3% | 15.8% | 4.3861 |
| 13 | Denmark | 66.0% | 15.4% | 4.2857 |
| 14 | the United Kingdom | 67.0% | 15.8% | 4.2405 |
| 15 | Latvia | 69.6% | 16.7% | 4.1677 |
| 16 | France | 65.2% | 16.2% | 4.0247 |
| 17 | Finland | 66.7% | 16.4% | 4.0671 |
| | **Total:** | **67.3%** | **17.0%** | **3.9588** |
| 18 | Bulgaria | 68.7% | 17.4% | 3.9483 |
| 19 | Austria | 67.5% | 17.5% | 3.8571 |
| 20 | Estonia | 67.5% | 17.5% | 3.8571 |
| 21 | Portugal | 66.3% | 17.3% | 3.8324 |

| | | | | |
|---|---|---|---|---|
| 22 | Spain | 67.8% | 17.8% | 3.8090 |
| 23 | Belgium | 66.1% | 17.4% | 3.7989 |
| 24 | Sweden | 65.7% | 17.9% | 3.6704 |
| 25 | Greece | 66.7% | 19.0% | 3.5105 |
| 26 | Germany | 66.3% | 19.8% | 3.3485 |
| 27 | Italy | 66.4% | 19.9% | 3.3367 |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31March 2008.

Slovakia, whose ratio of the population aged 15-64 to the population 65+ was estimated at 5.8607, has the highest capability in that area. The worst situation is in Italy, where that ratio amounted to 3.3367. The average ratio for the whole European Union was estimated at 3.9588. Slovakia, Cyprus and Ireland are the countries with the most favourable parameters in that area and Italy, Germany and Greece were the countries with the least favourable ones.

The percentage of young people in the population is vital for unfunded pension systems. The number of people at pre-working age in particular EU countries is presented in **Table no. 15**.

**Table no. 15**

**The population aged 0-14 in the European Union countries in July 2007**

| No. | Country | Population | % of people aged 0-14 | Number of people aged 0-14 |
|---|---|---|---|---|
| 1 | France | 63,718,187 | 18.6% | 11,851,583 |
| 2 | Germany | 82,400,996 | 13.9% | 11,453,738 |
| 3 | the United Kingdom | 60,776,238 | 17.2% | 10,453,513 |
| 4 | Italy | 58,147,733 | 13.8% | 8,024,387 |
| 5 | Poland | 38,518,241 | 15.5% | 5,970,327 |
| 6 | Spain | 40,448,191 | 14.4% | 5,824,540 |
| 7 | Romania | 22,276,056 | 15.6% | 3,475,065 |
| 8 | the Netherlands | 16,570,613 | 17.8% | 2,949,569 |
| 9 | Portugal | 10,642,836 | 16.5% | 1,756,068 |

| | | | | |
|---|---|---|---|---|
| 10 | Belgium | 10,392,226 | 16.5% | 1,714,717 |
| 11 | Greece | 10,706,290 | 14.3% | 1,530,999 |
| 12 | Hungary | 9,956,108 | 15.3% | 1,523,285 |
| 13 | Sweden | 9,031,088 | 16.4% | 1,481,098 |
| 14 | the Czech Republic | 10,228,744 | 14.1% | 1,442,253 |
| 15 | Austria | 8,199,783 | 15.1% | 1,238,167 |
| 16 | Bulgaria | 7,322,858 | 13.9% | 1,017,877 |
| 17 | Denmark | 5,468,120 | 18.6% | 1,017,070 |
| 18 | Slovakia | 5,447,502 | 16.4% | 893,390 |
| 19 | Finland | 5,238,460 | 16.9% | 885,300 |
| 20 | Ireland | 4,109,086 | 20.8% | 854,690 |
| 21 | Lithuania | 3,575,439 | 14.9% | 532,740 |
| 22 | Latvia | 2,259,810 | 13.6% | 307,334 |
| 23 | Slovenia | 2,009,245 | 13.7% | 275,267 |
| 24 | Estonia | 1,315,912 | 15.0% | 197,387 |
| 25 | Cyprus | 788,457 | 19.9% | 156,903 |
| 26 | Luxembourg | 480,222 | 18.8% | 90,282 |
| 27 | Malta | 401,880 | 16.7% | 67,114 |
| | **Total:** | **490,430,321** | **15.7%** | **76,984,664** |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31March 2008.

In all the European Union countries there were almost 77 million people aged 0-14. In absolute values, France had the highest number of those aged 0-14, while Malta had the lowest one. The higher position of France in that table than in the survey on total population resulted from a very high percentage of people aged 0-14 in the whole population. In that age group, the French compensated for the difference of 19 million people, compared to Germany, in the total number of population. France, Germany and the UK had the highest number of inhabitants aged 0-14. The fact that Malta, Luxembourg and Cyprus had the lowest one was also reflected in their position in the survey on the total population. Among the EEC countries in 1957, France had the highest percentage of people aged 0-14 and Luxembourg had the lowest one in July 2007. Among the countries which joined the EC between 1973 and 1995, the UK had the highest number of those aged 0-14 and Ireland had the lowest one in July 2007, which remained relevant to their positions in the survey on the total population. Among the countries which joined the European Union in 2004, Poland had the highest number of people aged 0-14 and Malta had the lowest one in July 2007. In the case of Poland, it is worth noticing that in that age group there were more people than in Spain, whose population amounts to 2 million people more than that of Poland. Among the countries which joined the European Union in 2007, Romania had a higher number of those aged 0-14.

Beside the absolute values, the percentage of inhabitants at pre-working age in the total number of population is also important. This is why it is necessary to present the data concerning this factor, which is done in **Table no. 16**.

**Table no. 16**

**The percentage of those aged 0-14 in the population of particular European Union countries in July 2007**

| No. | Country | % of those aged 0-14 |
|---|---|---|
| 1 | Ireland | 20.8% |
| 2 | Cyprus | 19.9% |
| 3 | Luxembourg | 18.8% |
| 4 | France | 18.6% |
| 5 | Denmark | 18.6% |
| 6 | the Netherlands | 17.8% |
| 7 | the United Kingdom | 17.2% |
| 8 | Finland | 16.9% |
| 9 | Malta | 16.7% |
| 10 | Portugal | 16.5% |
| 11 | Belgium | 16.5% |
| 12 | Sweden | 16.4% |
| 13 | Slovakia | 16.4% |
| | **Total:** | **15.7%** |

| | | |
|---|---|---|
| 14 | Romania | 15.6% |
| 15 | Poland | 15.5% |
| 16 | Hungary | 15.3% |
| 17 | Austria | 15.1% |
| 18 | Estonia | 15.0% |
| 19 | Lithuania | 14.9% |
| 20 | Spain | 14.4% |
| 21 | Greece | 14.3% |
| 22 | the Czech Republic | 14.1% |
| 23 | Germany | 13.9% |
| 24 | Bulgaria | 13.9% |
| 25 | Italy | 13.8% |
| 26 | Slovenia | 13.7% |
| 27 | Latvia | 13.6% |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31March 2008.

The percentage of those aged 0-14 in the population reflects the future of the unfunded pension systems. Ireland had the highest rate of people aged 0-14 in the population, which amounted to 20.8%, and Latvia had the lowest rate, estimated at 13.6%. The average value for the whole European Union was equal to 15.7%. Ireland, Cyprus and Luxembourg were the countries with the highest percentage, for each of them not lower than 18.8%, which reflects the highest demographic capabilities of those countries to finance the unfunded pension systems. Latvia, Slovenia and Italy had the lowest numbers of inhabitants aged 0-14 in population, for each of them not higher than 13.8%. In comparison to other states, those countries had the lowest capabilities to finance the unfunded pension systems in future.

The capability to finance the unfunded pension systems is well illustrated with the ratio of population at pre-working age to the number of people at retirement age, which is shown in **Table no. 17**.

**Table no. 17**

**The ratio of those aged 0-14 to the number of those aged 65+ in the population of particular European Union countries in July 2007**

| No. | Country | % of those aged 0-14 | % of those aged 65+ | Ratio of 0-14 to 65+ |
|---|---|---|---|---|
| 1 | Ireland | 20.8% | 11.7% | 1.7778 |
| 2 | Cyprus | 19.9% | 11.8% | 1.6864 |
| 3 | Slovakia | 16.4% | 12.2% | 1.3443 |
| 4 | Luxembourg | 18.8% | 14.7% | 1.2789 |
| 5 | the Netherlands | 17.8% | 14.4% | 1.2361 |
| 6 | Malta | 16.7% | 13.8% | 1.2101 |
| 7 | Denmark | 18.6% | 15.4% | 1.2078 |
| 8 | Poland | 15.5% | 13.3% | 1.1654 |
| 9 | France | 18.6% | 16.2% | 1.1481 |
| 10 | the United Kingdom | 17.2% | 15.8% | 1.0886 |
| 11 | Romania | 15.6% | 14.7% | 1.0612 |
| 12 | Finland | 16.9% | 16.4% | 1.0305 |
| 13 | Hungary | 15.3% | 15.4% | 0.9935 |
| 14 | the Czech Republic | 14.1% | 14.7% | 0.9592 |
| 15 | Portugal | 16.5% | 17.3% | 0.9538 |
| 16 | Belgium | 16.5% | 17.4% | 0.9483 |
| 17 | Lithuania | 14.9% | 15.8% | 0.9430 |
| | **Total:** | **15.7%** | **17.0%** | **0.9235** |
| 18 | Sweden | 16.4% | 17.9% | 0.9162 |
| 19 | Austria | 15.1% | 17.5% | 0.8629 |
| 20 | Estonia | 15.0% | 17.5% | 0.8571 |
| 21 | Slovenia | 13.7% | 16.0% | 0.8563 |
| 22 | Latvia | 13.6% | 16.7% | 0.8144 |
| 23 | Spain | 14.4% | 17.8% | 0.8090 |
| 24 | Bulgaria | 13.9% | 17.4% | 0.7989 |
| 25 | Greece | 14.3% | 19.0% | 0.7526 |
| 26 | Germany | 13.9% | 19.8% | 0.7020 |
| 27 | Italy | 13.8% | 19.9% | 0.6935 |

Source: Own elaboration based on the data from https://www.cia.gov/library/publications/the-world-factbook/index.html, accessed 31 March 2008.

Ireland, whose ratio of people aged 0-14 to the number of those aged 65+ amounted to 1.7778, had the highest capability in that area. Italy, whose ratio was equal to 0.6935, was in the worst position in that classification. The average ratio for the whole European Union accounted for 0.9235. In all countries where that ratio is lower than 1.000, the generation of pensioners is not being replaced with the generation of young people. Ireland, Cyprus and Slovakia were the countries enjoying the most favourable parameters, while Italy, Germany and Greece had the least favourable ones.

### 3.1.3 The development of pension systems

The development of pension systems in particular European Union countries concerns two elements: 1) the introduction of a universal mandatory pension system, and 2) the introduction of the obligation to participate in the 2$^{nd}$ pension pillar. It also considers voluntary pension savings, which are characteristic of the 3$^{rd}$ pillar, according to the nomenclature of the World Bank.

**The first universal mandatory pension systems** were introduced in the countries belonging currently to the European Union as early as in the 19$^{th}$ c. It is worth noticing that such systems were implemented in the countries of the present European Union by the end of the 1950s. The detailed list is presented in **Table no. 18**.

**Table no. 18**

**The year of the introduction of a universal pension system in the European Union countries**

| No. | Country | Year |
|---|---|---|
| 1 | Germany | 1889 |
| 2 | Denmark | 1891 |
| 3 | Belgium | 1900 |
| 4 | the Netherlands | 1901 |
| 5 | Austria | 1906 |
| 6 | the Czech Republic | 1906 |

| | | |
|---|---|---|
| 7 | Slovakia | 1906 |
| 8 | Ireland | 1908 |
| 9 | the United Kingdom | 1908 |
| 10 | France | 1910 |
| 11 | Luxembourg | 1911 |
| 12 | Romania | 1912 |
| 13 | Sweden | 1913 |
| 14 | Spain | 1919 |
| 15 | Italy | 1919 |
| 16 | Lithuania | 1922 |
| 17 | Latvia | 1922 |
| 18 | Slovenia | 1922 |
| 19 | Bulgaria | 1924 |
| 20 | Estonia | 1924 |
| 21 | Poland | 1927 |
| 22 | Hungary | 1928 |
| 23 | Greece | 1934 |
| 24 | Portugal | 1935 |
| 25 | Finland | 1937 |
| 26 | Malta | 1956 |
| 27 | Cyprus | 1957 |

Source: Own elaboration based on the data from *Social Security Programs Throughout the World: Europe, 2006* (2006).

The data contained in **Table no. 18** show the introduction process of the universal pension systems in a chronological order in particular European Union countries. The implementation of the universal pension systems in **the philosophical context** constituted the transition from the individual into the collective responsibility for the future of the elderly, and due to its mandatory character, it meant the restriction of human freedom. Germany and Denmark, which introduced the universal pension systems at the turn of the 1890s and 1900s, were the leaders in that area. Between 1900 and 1913, the universal pension systems came into force in 11 countries, especially in Western Europe. Directly after World War I, the universal pension systems were implemented in the countries located on the big European peninsulas: in Spain and in Italy. In the 1920s such systems were adopted in 7 countries of Central and Eastern Europe. During the next decade, the universal pension systems were introduced in the countries located on the peripheries of Europe and in the 1950s in insular countries located on the Mediterranean Sea. Observing the dynamics of universal pension systems development in Europe, one can draw a conclusion about the 'contagious' character of adopting them. At first, those systems were of the capital character and the assets accumulated in pension funds were invested in capital markets. In the 1930s and 1940s, the military authorities of Fascist Italy and Nazi Germany used the fund assets to finance budgetary expenditures, especially armaments. The decrease in the capital assets of pension funds gradually led to the necessity of financing pension payouts directly through contributions and taxes. It meant the gradual conversion into unfunded pension systems. Directly after World War II, the solution initiated by Italy and Germany was emulated by all the countries under the influence of the Soviet Union and also in other European Union countries[1]. The English term 'pay-as-you-go' was adopted to define the method of financing pensions. In **the economic context**, it meant the conversion of the market method of pension management into a redistribution one. The transition of the redistribution trend in the area of universal pensions did not take place in Europe until the 1990s, when in 1994 Sweden adopted the law which provided an individual record of pension contributions accumulated in the pension schemes. Swedish pioneerism in that area was disturbed a few times by postponing the implementation of the law. In 1995 similar laws were introduced in Latvia and Italy. In those two countries, a solution

[1] One may risk a statement that the transition of pension systems from funded into unfunded ones was the result of expanding the influence by the Socialists: the leader of Fascist Italy – Mussolini, was a socialist, the leader of Nazi Germany – Hitler was also a socialist but a national one. Stalin, the leader of the communist Soviet Union, who controlled the countries of Eastern Europe, also admitted that he was a socialist. The rules of socialists and social democrats often appeared in the countries of West Europe after World War II as well.

based on notionally defined contribution (NDC) rule was introduced on 1 January and 1 July 1996, respectively. It ensures the individual record of contributions, actuarial calculation of the pension by dividing the personal assets accumulated in the system by the predicted number of retirement years of a certain person. That method was implemented in Sweden and Poland only in 1999. Moreover, the NDC system came into force in Estonia in 2004 and in Romania in 2008. The NDC formula does not mean the resignation from the repartition method of financing pensions but it constitutes an intellectual breakthrough – concrete persons with real recordable but not yet disposable assets came out of the shapeless mass of the previous pension system. No European country has yet made a decision about the securitization of liabilities incurred by the budget or governmental agency towards the members of pension systems[2].

Another solution worth noticing is **the introduction of an obligation to participate in the 2nd pillar**. Contrary to universal pension systems, mandatory solutions of the 2nd pension pillar were not introduced in all European Union countries. The details in that area are enumerated in **Table no. 19**.

**Table no. 19**

**The year of the introduction of the mandatory 2nd pension pillar in the European Union countries**

| No. | Country | Year |
|---|---|---|
| 1 | the Netherlands | 1949 |
| 2 | the United Kingdom | 1961 |
| 3 | France | 1961 |
| 4 | Finland | 1962 |
| 5 | Denmark | 1964 |
| 6 | Cyprus | 1980 |
| 7 | Hungary | 1998 |
| 8 | Sweden* | 1999 |
| 9 | Poland | 1999 |

2 Such a decision was taken first in Chile and later in other countries of South America.

| | | |
|---|---|---|
| 10 | Latvia | 2001 |
| 11 | Bulgaria | 2002 |
| 12 | Estonia | 2002 |
| 13 | Germany | 2002 |
| 14 | Austria | 2003 |
| 15 | Slovakia | 2004 |
| 16 | Lithuania** | 2004 |
| 17 | Italy | 2007 |
| 18 | Romania | 2008 |
| 19 | Belgium | voluntary |
| 20 | Greece | voluntary |
| 21 | Ireland | voluntary |
| 22 | Luxembourg | voluntary |
| 23 | Portugal | voluntary |
| 24 | Slovenia*** | voluntary |
| 25 | Spain | voluntary |
| 26 | the Czech Republic | none |
| 27 | Malta | none |

* In Sweden the participation in the 2nd pension pillar is quasi-mandatory. There is no obligation imposed on the employee by law but it is legally obligatory to pay pension contributions to the 2nd pillar by the employer, if the employee wishes so.

** The pension system in Lithuania provides an opportunity to choose the 2nd pension pillar voluntarily, but independent of the participant's decision, it is mandatory for him or her to pay pension contributions, which may be but do not have to be transferred to the 2nd pillar. With such a rule, the 2nd pension pillar was adopted in Lithuania.

*** In literature, Slovenia is sometimes included into the group of the countries with a mandatory 2nd pillar. However, it was decided there that the obligatory character of the participation in the 2nd pillar depends on the agreement signed by social partners. When there is no such an agreement, there is no obligation to pay contributions to the 2nd pillar either. So there is no obligation imposed by state laws of paying contributions to the 2nd pillar.

Source: Own elaboration based on the data from Social Security Programs Throughout the World: Europe, 2006 (2006).

The Netherlands was a pioneer in imposing an obligation to pay contributions to the 2nd pillar. In that country, as early as in 1949, occupational schemes became mandatory, which could be perceived as the feature of the 2nd pension pillar, according to the classification of the World Bank of 1994. Dutch mandatory pension funds of the 2nd pillar play a key role in financing pensions in that country and the assets accumulated within those funds make them the largest institutions of that kind in the world. According to the chronological order, the next group embraced mandatory occupational pension funds, which were introduced in Denmark, Finland, France, and the UK, between 1961 and 1964. In all those countries, except for Finland, the introduction of the mandatory participation in occupational pension funds, which related the level of the pension to earnings, was preceded with the voluntary occupational pension funds. That group also embraces solutions later adopted in Austria, Cyprus, Germany, and Italy.

A separate group contains solutions implemented in Hungary, Sweden and Poland between 1998 and 1999, which were based on the World Bank recommendations of 1994. Those countries carried out the reform of the system introducing the 2nd pension pillar, which up to then had not even existed in a voluntary form[3]. That solution was later implemented in Bulgaria, Estonia, Latvia, Lithuania, Slovakia, and Romania.

Another group covers the countries in which the 2nd pillar operates in the form of voluntary occupational pension funds. That group contains: Belgium, Greece, Ireland, Luxembourg, Portugal, Slovenia, and Spain, but in none of those countries does the 2nd pillar play an important role in financing pensions.

The last group of countries is composed of the Czech Republic and Malta, which completely lack the 2nd pension pillar.

The solutions which are the part of the 3rd pillar are based on individual or collective decisions about transferring the part of available assets to pension funds. There are different forms of the 3rd pillar in all the European Union countries. The most common forms are voluntary pension funds, investment funds, pension insurances in life insurance companies and pension deposits in banks, and in some countries – real estate investments or

[3] As mentioned above, in Sweden the 2nd pension pillar was of quasi-mandatory character.

direct investments in companies listed in stock exchanges. All those solutions are also available in the form of the civil legal contracts without the necessity of earmarking those assets for pensions. However, they become a part of state pension systems when they are connected with various tax reliefs or tax exemptions.

## 3.2 THE ELEMENTS DISTINGUISHING PARTICULAR PENSION SYSTEMS

### 3.2.1 The specification of distinguishing elements

The analysis of pension systems in 27 European Union Member States reflects the wide variety of adopted solutions. At the same time, in almost every country there are elements which distinguish those countries in international comparisons. This subchapter is an attempt to classify, group and estimate those distinguishing elements in analysed pension systems. The comparison of elements distinguishing each particular pension system, which were mentioned in Chapter II, is presented in **Table no. 20**.

**Table no. 20**

**The elements distinguishing pension systems in the European Union countries**

| No. | Country | A distinguishing element |
|---|---|---|
| 1 | Austria | Financing pensions for those who stay at home looking after small children through the budget; flexible retirement age |
| 2 | Belgium | The Pension Mediation Institution |
| 3 | Bulgaria | Special treatment of workers of the so-called category I and II, which transfers the pension complaints of persons working in very difficult conditions from the area of system discrepancies into the area of discrepancies resulting from the level of pension contributions paid by the employer |
| 4 | Cyprus | The Senior Citizens' Parliament which is the form of representation of pensioners' interests |

| | | |
|---|---|---|
| 5 | the Czech Republic | Connecting the retirement age for women with the number of children to whom they have given gave birth |
| 6 | Denmark | The integrated IT platform called PensionInfo, where pensioners may find information concerning pension systems and check the balance of their personal pension accounts |
| 7 | Estonia | Modernity concerning the availabilty of all pension system elements on the Internet |
| 8 | Finland | Special pension payment cards |
| 9 | France | Equal retirement age for men and women |
| 10 | Germany | The system of electronic cards for pensioners |
| 11 | Greece | The National Actuary |
| 12 | Hungary | E-NYENYI – the Internet platform enabling the access to individual pension accounts in the 1st pillar |
| 13 | Ireland | The Office of the Pensions Ombudsman |
| 14 | Italy | Pioneering introduction of the NDC system in the 1st pillar |
| 15 | Latvia | The possibility of choosing the time of retirement after reaching the statutory retirement age |
| 16 | Lithuania | Completely voluntary participation in the 2nd pillar, with no age limits imposed |
| 17 | Luxembourg | The possibility to receive reimbursment of the contributions paid for the basic pension insurance after reaching the age of 65 in the case when a person is not entitled to the pension benefit |
| 18 | Malta | The complete lack of alternative pension systems for particular professional groups apart from the general pension system |
| 19 | the Netherlands | Voluntary participation in a large variety of additional sub-schemes within a funded scheme; life cycle savings plan |
| 20 | Poland | The obligation to inform those insured about the balance of their pension accounts in the 1st pillar by an insurance company |
| 21 | Portugal | The use of a certain amount of money from VAT to finance the pension system |
| 22 | Romania | Currently, in international comparisons, it is difficult to indicate solutions worth copying in other countries |

| | | |
|---|---|---|
| 23 | Slovakia | A very high share of funded pension pillar in the division of pension contribution |
| 24 | Slovenia | Using the income from the privatization of State Treasury Property to finance pension system |
| 25 | Spain | Special pension schemes for home workers |
| 26 | Sweden | A special Internet portal, where all the information about the balance of the individual pension accounts within all schemes is available |
| 27 | the United Kingdom | The Pension Ombudsman |

Source: Own elaboration.

### 3.2.2 The classification of distinguishing elements

The elements distinguishing each particular pension system, presented in **Table no. 20,** are in many cases similar or even identical. The above-mentioned solutions may be divided into the following categories:

- solutions concerning the way of financing the pension system,
- solutions concerning the way of determining the retirement age,
- solutions concerning the institutions operating in the area of pensions,
- technical solutions concerning pensions,
- solutions concerning special system ideas,
- solutions concerning the obligation or the lack of obligation to participate,
- solutions concerning the access to the accumulated assets,
- solutions concerning the obligation to inform,
- solutions concerning the division of the contribution between the pillars.

Now, let us try to ascribe each particular solution to the separate above-mentioned categories. Such a classification is presented in **Table no. 21**.

**Table no. 21**

**The classification of elements distinguishing each particular pension system in the European Union countries**

| No. | Category of solution | Examples |
|---|---|---|
| 1 | solutions concerning the way of financing the pension system | 1. financing pension contributions for those who stay at home looking after small children through the budget (Austria); 2. special treatment of workers of the so-called category I and II, which transfers the pension complaints of persons working in very difficult conditions from the area of system discrepancies into the area of discrepancies resulting from the level of pension contributions paid by the employer (Bulgaria); 3. using a certain amount of income from VAT to finance pension system (Portugal); 4. using the income from the privatization of State Treasury Property to finance pension system (Slovenia) |
| 2 | solutions concerning the way of determining the retirement age | 1. flexible retirement age (Austria); 2. connecting the retirement age for women with the number of children to whom they have given birth (the Czech Republic); 3. equal retirement age for men and women (France); 4. the possibility of choosing the time of retirement after reaching the statutory retirement age (Latvia) |
| 3 | solutions concerning the institutions operating in the area of pensions | 1. the Pension Mediation Service (Belgium); 2. the Senior Citizens' Parliament (Cyprus); 3. the National Actuary (Greece); 4. the Office of the Pensions Ombudsman (Ireland); 5. the Pension Ombudsman (the United Kingdom) |
| 4 | technical solutions concerning pensions | 1. the integrated IT platform called PensionInfo, where pensioners may find information concerning pension systems and check the balance of their personal pension accounts (Denmark); 2. the availability of all pension system elements on the Internet (Estonia); 3. special pension payment cards (Finland); 4. electronic cards for pensioners (Germany); 5. a special Internet portal, where all the information about the balance of the individual pension accounts within all schemes is available (Sweden); 6. E-NYENYI – the Internet platform enabling the access to individual pension accounts in the 1st pillar (Hungary) |

| | | |
|---|---|---|
| 5 | solutions concerning special system ideas | 1. special pension schemes for home workers (Spain); 2. life cycle savings plan (the Netherlands); 3. of alternative pension systems for particular professional groups apart from the general pension system (Malta); 4. pioneering introduction of the NDC system in the 1st pillar (Italy) |
| 6 | solutions concerning the obligation or the lack of obligation to participate | 1. voluntary participation in a large variety of additional sub-schemes within a funded scheme (the Netherlands); 2. completely voluntary participation in the 2nd pillar, with no age limits imposed (Lithuania) |
| 7 | solutions concerning the access to the accumulated assets | 1. the possibility to receive reimbursement of the contributions paid for the basic pension insurance after reaching the age of 65 in the case when a person is not entitled to the pension benefit (Luxembourg) |
| 8 | solutions concerning the obligation to inform | 1. the obligation to inform those insured about the balance of their pension accounts in the 1st pillar by an insurance company (Poland) |
| 9 | solutions concerning the division of the pension contribution between pillars | 1. a very high share of funded pension pillar in the division of pension contribution (Slovakia) |

Source: Own elaboration.

In international comparisons, the highest number of interesting solutions, i.e. six, was recorded in the category of technical solutions concerning pensions. Five solutions were enumerated in the category of institutions operating in the area of pensions. In the category of solutions concerning the way of determining the retirement age and those concerning special system ideas, there were four elements in each. Two solutions concerned the obligation and the lack of obligation to participate, and one solution was recorded in the area of the access to accumulated assets, the obligation to inform and the division of pension contribution between pillars. At this point, the particular examples of solutions are going to be analysed, according to the classification order contained in **Table no. 21**.

- **solutions concerning the way of financing the pension system**

1. financing pension contributions for those who stay at home looking after small children through the budget (Austria)
   While designing pension systems, it is possible to predict the way of financing pension contributions in various situations. Such situations may embrace e.g. unemployment, the necessity to look after people who need such a care, the obligatory military service or a disease. Each of those situations is characterized by the lack of assets to finance the pension contributions of mandatory pension insurance from current income. The task of pension system designers is to determine whether in such a situation the person covered by a system has to cope alone with that hardship or whether that person is to be supported with the public assets accumulated earlier. In Austria it has been decided to finance the pension contributions of those looking after small children from the budget. Such a state of affairs may be defined as a promotion of the family development by state assets.
2. special treatment of workers of the so-called category I and II, which transfers the pension complaints of persons working in very difficult conditions from the area of system discrepancies into the area of discrepancies resulting from the level of pension contributions paid by the employer (Bulgaria) While creating pension systems, there is always a question whether to treat various occupational groups equally or not. There are various arguments in favour of and against equal treatment of different people by pension systems. If one supports the idea of equal treatment, the rules are the same for everyone. However, various groups of interest may lobby politicians to achieve more favourable treatment for themselves than the others. In European reality, lobbying often results in separate pension schemes for each particular occupational group – farmers, miners, teachers, civil servants, seamen

or ballet dancers. The solution adopted in Bulgaria may be perceived as a compromise between universal, unanimous system for all members and a system with separate schemes for various occupational groups.

3. using a certain amount of income from VAT to finance pension system (Portugal)
   A general rule, while designing taxes, is an obligation to transfer a part of assets to a public institution. That public institution may be understood as a state and in that case taxes are transferred to a central budget or as a local government entity and in that case taxes are transferred to the budget of that entity. Next, the income from taxes is allocated to carrying out public projects but it is the recipient's task to decide about the allocation of taxes. It is very rare to ascribe a tax to an exact public project. However, there are exceptions to the rule, e.g. dedicating the income from taxes on means of transport to roads maintenance. Then, a tax is more similar in its form to a contribution allocated to a certain purpose than to a tax. Such a solution has been adopted in Portugal when it has been decided to use a certain amount of VAT levied by a state to finance the pension system.
4. using the income from the privatization of State Treasury Property to finance pension system (Slovenia)
   In the countries where the economy was centrally planned, a lot of elements belonged to the state. While transforming it into a market economy, the necessity of transferring the state property to private owners appeared. Different countries adopted various forms of privatization. Sometimes it meant giving away the state property to eligible citizens of a particular country, and sometimes it meant selling it to domestic or foreign investors. In the latter case, the income was transferred to the budget. The assets gained in that way could be used to various purposes. They might be used to cover the current needs in the area of budgetary spending or to a certain purpose other than current expenditures. In the case of Slovenia, the needs of financing pension systems were associated with the income from privatization.

- **solutions concerning the way of determining the retirement age**

1. flexible retirement age (Austria)
   The determination, in regulations, of a certain time when a person is no longer able to work due to his or her age, is a reflection of bureaucratization of pension systems. Every person is a unique personality with his or her own vitality and with his or her own lifetime experiences, which are the reason for the lack of energy in old age. Therefore, the determination of the retirement age by a system is the expression of denying the right to decide about the time of retirement to a certain person and indirectly, it means the restriction of human freedom. Thus, more and more pension systems include a flexible retirement age, letting a certain person make a decision. Such a solution has been adopted in Austria.
2. connecting the retirement age for women with the number of children to whom they have given birth (the Czech Republic)
   Due to the biological characteristics of women, the way of treating women in pension systems is a real challenge for the designers of such systems. In most pension systems, the statutory retirement age for women is a few years lower than the retirement age for men. At the same time, against the convictions that women constitute a weaker gender, on average they live longer than men. It means the necessity of accumulating more assets for their retirement than in the case of men who live shorter. However, most often, against obvious calculations, the legislators determine various privileges for women while designing pension systems. One of those is the possibility and even the obligation to retire earlier than men. Certainly, such a solution may be treated as a favourable factor for women only in the systems based on a defined benefit rule (DB). Such a system operates in the Czech Republic. Beside a different retirement age for men and women, the retirement age for women has been connected with the number of children to whom they have given birth, as a part of the policy supporting procreation.
3. the equal retirement age for men and women (France)

While fulfilling all the vital functions designed for a woman, she has less time for professional work in her life cycle than a man. In patriarchal tradition, the length of pregnancy and childcare or the necessity to take care of a child in case of its disease, limit the length of women's employment. A direct connection of the amount of pension with the value of the pension contributions paid into the system means lower pensions for women. However, as it has been mentioned above, most pension systems provide a lower retirement age for women than for men. In systems with a defined benefit (DB), it is an element of a privileged treatment of women in comparison to men. In systems with a defined contribution (DC), it is a discriminatory element for women, who, having less time for professional work in youth than men, are legally deprived of the right to accumulate sufficient assets for the retirement. Equal retirement age for men and women, which has been adopted in France, seems to be a 'golden means' in that area.

4. the possibility of choosing the time of retirement after reaching the statutory retirement age (Latvia)
   Ideologically, the solution introduced in Latvia is in accordance with the above-mentioned solution adopted in Austria and will not be discussed.

- **solutions concerning the institutions operating in the area of pensions**

1. the Pension Mediation Service (Belgium)
   In the area of pensions, like in other areas of human activity, there may be various conflicts, which result from different interests of parties involved, imprecise legal texts or their different interpretation. In the case of the lack of agreement, it is difficult to solve a problem in a satisfactory way for both parties. Then, it is necessary to introduce a third person, who, being objective, should lead to the settlement of the conflict. The necessity of the introduction of the third party may be particularly important in the case of pension issues, where it

often happens that a disabled person, who has problems with such basic issues as physical and verbal communication, is a partner of a heartless system. It has been decided in Belgium that a special institution must be set up, which would handle pension mediation.

2. the Senior Citizens' Parliament (Cyprus)
   Ancient Athens already had the democracy with the ecclesia to take decisions in important matters. The idea of Parliament, as a place of expressing views and making essential decisions, dates back to the 13th c. in England. The Greek tradition, due to its language, as well as the British tradition, due to its colonial past, are present in the awareness of the Cypriot citizens. Therefore, they may be the reason for creating in the European Union that unique institution.
3. the National Actuary (Greece)
   An actuary is a professional in the area of calculating the risk and the up-to-date value of financial projects especially those long-term ones or those exposed to risk. Traditionally, the profession of an actuary has been connected with the area of insurances, reinsurances and pension plans. At a national scale, the actuary's task in the area of pensions is to predict the financial consequences of demographic changes in a certain country. The introduction of such an institution in Greece may be treated as the reflection of modern thinking about the future of pensions in that country.
4. the Pensions Ombudsman (Ireland) Historically, the institution of the ombudsman in public issues, called in Swedish, where that institution originated, an 'ombudsman', has been attached to an independent official, to whom one may apply after all other legal measures have been taken. An ombudsman should represent the interests of those on whose behalf he or she acts. Such a representation may cover collective and individual issues. In many countries there are ombudsmen for citizen rights, who handle any citizens' issues. Sometimes there are specialized ombudsmen who deal with the issues of insured persons, bank clients or consumers. In Ireland it has been decided that the Office of the Pension Ombudsman should be appointed.

5. the Pension Ombudsman (the United Kingdom)
   Ideologically, the solution introduced in the United Kingdom is in accordance with the above-mentioned solution adopted in Ireland and will not be discussed.

- **technical solutions concerning the area of pensions**
  The solutions in this category may be divided into two content-related groups: a) online access to pension accounts and b) pension payment cards. The first group covers the applications operating in Denmark, Estonia, Sweden and Hungary:

1. the integrated IT platform called PensionInfo, where pensioners may find information concerning pension systems and check the balance of their personal pension accounts (Denmark),
2. the availability of all pension system elements on the Internet (Estonia),
3. a special Internet portal, where all the information about the balance of the individual pension accounts within all schemes is available (Sweden),
4. E-NYENYI – the Internet platform enabling the access to individual pension accounts in the 1$^{st}$ pillar (Hungary).
   Internet platforms and portals constitute a modern form of gathering information concerning certain areas of contents. Most often they are designed in the form of Internet websites connected with each other through their graphics and functionality. An essential feature of Internet platforms is the possibility to provide information from different sources in one place and its attractive and clear presentation. Of course, in order to take advantage of Internet platforms and portals concerning pensions, three requirements must be fulfilled: 1) the appropriate IT and telecommunication infrastructure, 2) proper regulations enabling the usage of the Internet to communicate with other people, and 3) creating in a certain country sufficiently advanced IT culture, which is reflected through a frequent usage of the Internet while arranging various private and public issues. It seems that in Denmark, Estonia, Sweden and Hungary those requirements

have been met, and the operating of Internet platforms and portals is justified and is the reflection of the modernity.

The latter group applies to pension cards which take advantage of IT technologies:

5. special payment pensions cards (Finland),
6. the implementation of the electronic cards system for pensioners (Germany).

Payment cards, especially their electronic versions, are convenient and modern means of paying for goods and services without the necessity of possessing cash. They allow to make payments everywhere where payments by such cards are accepted. The necessary requirements for a successful transaction are as follows: 1) possessing a payment card by a person carrying out a transaction, 2) possessing a special device enabling the acceptance of payments by a seller of a service or goods, and 3) possessing by a payer sufficient amount of money in an account connected to a payment card or on the payment card itself. Payment cards for certain groups of consumers may be subject to various reliefs or exemptions from fees. Then, the recipient's bank account is supplied partly with payer's assets and partly or even completely with public assets. Thanks to such payment cards, pensioners may pay for medical services, public transport, tickets to institutions of culture, phone or power bills, taking advantage in their payments of public funding. Finland and Germany have decided to introduce such cards for pensioners.

- **solutions concerning special system ideas**

1. special pension schemes for home workers (Spain)

Unequal treatment of various occupational groups in pension systems is most often connected with separate pension schemes for those groups. Those are often occupational groups, whose members work in difficult or harmful conditions. The examples of such occupational groups are miners, seamen or pilots. Separate pension systems also often apply to uniformed services and other professions where very good health and the high level of physical fitness are essential to carry out those jobs. Sometimes separate pension schemes are connected with the nature of a profession like in the case of farmers or clergy. The designers of pension systems decide whether a certain occupational group should take advantage of a universal system or of a special scheme for a specific group of professionals. Perhaps due to the common character of home workers in Spain, it has been decided to create a separate pension regime for them.

2. life cycle savings plan (the Netherlands)
   The life cycle savings plan adopted in the Netherlands constitutes a pioneering solution at an international scale. The pension idea, dating back to Bismarck's times, does not record any other necessary periods of financial needs than the retirement. But the life preceding retirement is full of events, which are connected to unpredicted expenditures. Expenses on a house, buying a car, period of unemployment, expenditures on one's own education and education of one's children, child's wedding and finally the period of senility influence more or less intensively the financial balance of a certain person. The solution adopted in the Netherlands faces those events and allows to combine smoothly the periods of excessive income with the period of excessive expenditures in the whole life cycle of a person.
3. the complete lack of alternative pension schemes for particular professional groups apart from the general pension system (Malta)
   Creating separate pension schemes for certain occupational groups, as stated above, belongs to the tasks of pension system designers. In Malta it has been decided to standardize pensions without any group being treated in a different way than the others.
4. pioneering introduction of the NDC system in the 1$^{st}$ pillar (Italy)
   A traditional idea of a pension system did not predict an individual record of assets accumulated in a pension system. The record only pointed out the payment of contributions or its lack. That, in turn, was the reason for or against incorporating certain years into the contribution period and for calculating the pension on that basis and also based on the level of one's income. The NDC system, i.e. notionally defined contribution, constitutes a breakthrough in the thinking about the assets accumulated for the retirement. It applies to assets accumulated in the 1$^{st}$ pension pillar. It does not mean the

individual access to accumulated assets but it means an individual ascription of pension contributions to an individual but virtual account of a participant. Assets accumulated in such an account are subject to indexation and the assets accumulated after the indexation constitute a basis to calculate the level of pensions, taking into account life expectancy of a certain person estimated by an actuary. Italy has introduced such a solution as one of the first countries in the world.

- **solutions concerning the obligation or the lack of obligation to participate**

1. voluntary participation in variety of additional sub-schemes within a funded scheme (the Netherlands)  Most often social insurances embrace insurances against various kinds of risks. The insurance against various kinds of risks is always connected with the necessity to pay a pension contribution covering each of those risks. In case of mandatory systems, it is obligatory to pay all insurance contributions regardless of exposing a certain person to a certain risk. A classical example of a legislative paranoia is the necessity to pay a contribution covering the risk of maternity by men. The obligation of insurance and the lack of choice which risk we want to insure against and which we do not limit our freedom. The solution adopted in the Netherlands restores that freedom in the area of pension contributions.
2. completely voluntary participation in the 2$^{nd}$ pillar, with no age limits imposed (Lithuania)
   Pension reforms, which took place in many countries of Eastern Europe, determined the retirement age of those who mandatorily or voluntarily participated in the 2$^{nd}$ pension pillar. Such an attitude of the legislators was the result of their care to supply the pensioners with the pension benefits at the level, estimated by the employer, sufficient to live on. The participation in the 2$^{nd}$ pillar was often made impossible for persons at almost retirement age because it was believed that they were unable to accumulate sufficient assets for the

retirement in a funded pillar. In that way, the participants of pension systems were deprived of the free right in that area. The solution adopted in Lithuania lets the participant of the pension system decide whether the funded solution is favourable for him or her and whether he or she wants to take part in it or not.

- **solutions concerning the access to the accumulated assets**

1. the possibility to receive reimbursement of the contributions paid for the basic pension insurance after reaching the age of 65 in the case when a person is not entitled to the pension benefit (Luxembourg)
   In most traditional pension systems, the contributions paid into the basic system, i.e. the 1st pillar, constitute a basis to calculate a pension in future, but upon being paid they are not perceived as the property of the participants. The legal and philosophical idea of that insurance means that the government or its agency obliges itself to pay out pensions in future in return for contributions paid by a participant. At the same time, the title of money ownership is transferred to the government or the governmental agency, which uses the available assets to pay out current pensions. The solution adopted in Luxembourg restores the ownership of money to its original owners when they do not acquire the pension rights.

- **solutions concerning the obligation to inform**

1. the obligation to inform those insured about the balance of their pension accounts in the 1st pillar by an insurance company (Poland)
   Traditional pension systems do not offer individual records of assets accumulated in the 1st pillar. Therefore, it is impossible to report to the insured persons such information. Such a possibility comes into being while adopting the solution of the NDC type, whose basic feature is the record of contributions paid into individual pension accounts. Then, like in the case of the statements from standard bank accounts, it is possible to inform the participant about his or her assets. In

Poland the legislator took advantage of such a chance and imposed the obligation on the governmental agency managing the 1st pension pillar to convey such information to the insured persons.

- **solutions concerning the division of the pension contribution between pillars**

1. a very high share of funded pension pillar in the division of pension contribution (Slovakia)
   The implementation of the mandatory 2nd pension pillar, which is financed from the common contribution for the 1st and 2nd pillar, requires to make a decision about the division of the contribution between the 1st and 2nd pension pillar. The part of the contribution which remains in the 1st pillar is usually subject to indexation and is not burdened with a market risk. The part of the contribution transferred to the 2nd pillar may be invested in various financial instruments, including those burdened with market risk. At the same time, taking such a risk is connected with the possibility to achieve extraordinary investment profits. Most often, the legislators try to minimize the risk while investing the pension assets. The determination of the pension contribution, transferred to the 2nd pillar, at the level of 9% of earnings in Slovakia indicates that the legislator took a market risk in the area of pension insurances.
   To summarize the above-mentioned solutions, it should be stated that the solutions marked as the elements distinguishing each pension system were not only introduced in the enumerated countries. However, all the solutions indicated by the Author are in his opinion the elements worth considering in international comparisons.

### 3.2.3 The reference to the elements distinguishing each particular pension system

The elements distinguishing each particular pension system, which were mentioned in Chapter II, and classified in this subchapter, constitute a rather random conglomerate of features existing in a certain country.

There are elements, which are not unique only for a particular country, but were enumerated in a certain country due to the lack of other worthy distinguishing elements. For example, the equal retirement age for both genders does not only distinguish the French pension system but also a Swedish one, the NDC type does not only distinguish the Italian pension system, and connecting the retirement age for women with the number of children to whom they have given birth exists not only in the Czech Republic but also in Slovakia. Based on those elements, it is also difficult to create an ideal pension system, which could be copied in every economic and demographic conditions. Every country has its own culture and tradition, unique history, and the unique history of pension systems development. Those elements overlap with the degree of economic development, current economic and demographic situation, which are subject to constant change. Without taking those elements into account, it is difficult to design pension systems well adjusted to the reality of each country and it is even more difficult to create an ideal model.

## 3.3 SUMMARY

Pension systems in the European Union countries constitute a great mosaic of solutions being the variations of traditional unfunded pension systems and the attempts to introduce new solutions, which were earlier described as Anglo-Saxon, Latin American and Polish-Swedish attitudes. Generally it should be stated that the most frequent solution introduced in the European Union is a state pension system which ensures pensions related to the earlier remunerations.

At the beginning of the summary, let us try to refer to the elements presented in the subchapter *The conditions of European pension systems operating* by compiling the results and estimating their value, which will be used further to the evaluation of pension systems. The areas of economic potential and demography were subject to the quantitative evaluation and the development of pension systems was subject to the descriptive evaluation of qualitative features.

### 3.3.1 Quantitative evaluation

The rule of distinguishing the best three and the worst three countries in a certain category was adopted during the quantitative evaluation.In the area of economic potential it should be stated that:

1. considering the accumulated wealth, the best situation in the area of pensions is in Luxembourg, Ireland and Austria; Romania, Bulgaria and Poland are in the worst position;
2. considering the size of the national economy, Germany, France and the United Kingdom are in a favourable position; Malta, Cyprus and Estonia have the smallest economies;
3. the rate of economic growth is the most favourable in Latvia, Slovakia and Lithuania, and the least favourable in Denmark, Portugal and France;
4. in a short-term perspective, positive changes in the economic position in Europe may apply to the United Kingdom, Poland and Ireland; and the negative changes may apply to France, the Netherlands and Denmark;
5. the unemployment rate is the least favourable for Poland, Germany and Slovakia; and most favourable for Lithuania, Denmark and Cyprus.

A complete compilation of positive and negative features of each particular country in the area of economic potential is presented in **Table no. 22**.

**Table no. 22**

**The classification of European countries in the area of economic potential**

| No. | Country | Wealth | Economy | Rate of growth | Change of the position | Unemployment rate | Number of pluses | Number of minuses | Outcome |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Ireland | + | | | + | | 2 | 0 | 2 |
| 2 | Lithuania | | | + | | + | 2 | 0 | 2 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 3 | the United Kingdom | | + | | + | | 2 | 0 | 2 |
| 4 | Austria | + | | | | | 1 | 0 | 1 |
| 5 | Luxembourg | + | | | | | 1 | 0 | 1 |
| 6 | Latvia | | | + | | | 1 | 0 | 1 |
| 7 | Cyprus | | - | | | + | 1 | 1 | 0 |
| 8 | Germany | | + | | | - | 1 | 1 | 0 |
| 9 | Slovakia | | | + | | - | 1 | 1 | 0 |
| 10 | Belgium | | | | | | 0 | 0 | 0 |
| 11 | the Czech Republic | | | | | | 0 | 0 | 0 |
| 12 | Finland | | | | | | 0 | 0 | 0 |
| 13 | Greece | | | | | | 0 | 0 | 0 |
| 14 | Hungary | | | | | | 0 | 0 | 0 |
| 15 | Italy | | | | | | 0 | 0 | 0 |
| 16 | Slovenia | | | | | | 0 | 0 | 0 |
| 17 | Spain | | | | | | 0 | 0 | 0 |
| 18 | Sweden | | | | | | 0 | 0 | 0 |
| 19 | Denmark | | | - | - | + | 1 | 2 | -1 |
| 20 | France | | + | - | - | | 1 | 2 | -1 |
| 21 | Poland | - | | | + | - | 1 | 2 | -1 |
| 22 | Bulgaria | - | | | | | 0 | 1 | -1 |
| 23 | Estonia | | - | | | | 0 | 1 | -1 |
| 24 | Malta | | - | | | | 0 | 1 | -1 |
| 25 | the Netherlands | | | | - | | 0 | 1 | -1 |
| 26 | Portugal | | | - | | | 0 | 1 | -1 |
| 27 | Romania | - | | | | | 0 | 1 | -1 |

Source: Own elaboration.

The analysis of results presented in **Table no. 22** shows that Ireland, Lithuania and the United Kingdom have achieved two pluses without any negative marks, which could be identified with the position of the countries with most favourable parameters in the area of economic potential. Austria, Luxembourg and Latvia have received one plus without any negative marks. Out of the countries at the bottom of the table, which have received the value -1, six, i.e. Romania, Portugal, the Netherlands, Malta, Estonia and Bulgaria, have no pluses, and the three remaining countries, i.e. Poland, France and Denmark, had a higher number of minuses than pluses. The countries which have not received either a positive or negative grade have been marked with grey colour.

In the area of demography it should be stated that:

1. the size of population is treated as a neutral parameter and is not taken into account in the evaluation;
2. considering the number of inhabitants aged 65+, Malta, Luxembourg and Cyprus are in the most favourable position; while Germany, Italy and France are in the worst position;
3. the percentage of those aged 65+ in the population is the most favourable for Ireland, Cyprus and Slovakia, and the least favourable for Italy, Germany and Greece;
4. in the area of life expectancy at birth, the citizens of Latvia, Romania and Estonia live the shortest and those of Sweden, France and Italy – the longest[4];
5. the difference between life expectancy at birth between genders may cause the most problems in Estonia, Latvia and Lithuania, and the fewest problems in Malta, Sweden and Denmark;
6. with respect to the number of those at working age, Germany, France and the United Kingdom are in the most favourable situation, while Malta, Luxembourg and Cyprus are in the least favourable position;
7. considering the rate of unemployment, Germany, Poland and France are in the least favourable situation, and Luxembourg, Malta and Cyprus are in the most favourable situation;
8. considering the percentage of those at working age, Slovakia, the Czech Republic and Poland have the best situation, while France, Sweden and Denmark have the worst situation;
9. considering the ratio of those aged 15-64 to the number of citizens aged 65+, Slovakia, Cyprus and Ireland are in the best situation, and Italy, Germany and Greece are in the worst situation;

[4] From the financial perspective, in pension systems the shorter life expectancy at birth is a favourable element, which triggers negative emotions, but is a stated fact.

10. in the area of the population aged 0-14, France, Germany and the United Kingdom record the highest number of citizens at that age, and Malta, Luxembourg and Cyprus the lowest;
11. considering the percentage of citizens aged 0-14, Ireland, Cyprus and Luxembourg are in the most favourable position, while Latvia, Slovenia, and Italy are in the least favourable position;
12. considering in the area of the ratio of the population aged 0-14 to the population aged 65+, Ireland, Cyprus and Slovakia are in the most favourable situation, while Italy, Germany and Greece are in the least favourable situation.

A complete classification of advantages and disadvantages of each country in the area of demography is presented in **Table no. 23**.

The analysis of results presented in **Table no. 23** shows that Ireland and Slovakia are the countries which received four pluses without any negative marks, which could be identified with the countries characterized with the most favourable parameters in the area of demography. Six pluses and only two minuses were given to Cyprus. At the bottom of the table there was Italy with the worst demographic situation. Italy received six minuses and no pluses. Greece and Germany, which were estimated at -3, and France and Sweden, which were estimated at -2, were also very negatively distinguished in the area of demographic situation. Eight countries of the European Union, i.e. Austria, Belgium, Bulgaria, Finland, Hungary, the Netherlands, Portugal and Spain did not receive either pluses or minuses.

The combined evaluation of the economic potential and the demography is presented in **Table no. 24.** Additionally, the table considers the division of the European Union countries into base groups, where the number of marks received by particular countries constitutes a basis:

- base group A embraces countries which received at least 3 points,
- base group B embraces countries which received 1 or 2 points,
- base group C embraces countries which received 0 points,
- base group D embraces countries which received -1 or -2 points,
- base group E embraces countries which received -3 or fewer points.

The evaluation expressed with a capital letter is accompanied with an Arabic numeral every time there is a difference in the number of partial points.

**Table no. 23**

**The classification of European Union countries in the area of demography**

| No. | Country | Population aged 65+ | % of population aged 65+ | Life expectancy at birth | The age differences between genders | Population at working age | Number of unemployed | % of persons at working age in the population | Ratio of 15-64 to 65+ | Number of people aged 0-14 | % of people aged 0-14 | Ratio of 0-14 to 65+ | Number of pluses | Number of minuses | Outcome |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Ireland | | + | | | | | | + | | + | + | 4 | 0 | 4 |
| 2 | Slovakia | | + | | | | | + | + | | | + | 4 | 0 | 4 |
| 3 | Cyprus | + | + | | | – | + | | + | – | + | + | 6 | 2 | 4 |
| 4 | the United Kingdom | | | | | + | | | | + | | | 2 | 0 | 2 |
| 5 | the Czech Republic | | | | | | | + | | | | | 1 | 0 | 1 |
| 6 | Romania | | | + | | | | | | | | | 1 | 0 | 1 |
| 7 | Luxembourg | + | | | | – | + | | | – | + | | 3 | 2 | 1 |
| 8 | Malta | + | | | + | – | + | | | – | | | 3 | 2 | 1 |
| 9 | Denmark | | | | + | | | – | | | | | 1 | 1 | 0 |
| 10 | Estonia | | | + | – | | | | | | | | 1 | 1 | 0 |
| 11 | Poland | | | | | | – | + | | | | | 1 | 1 | 0 |
| 12 | Austria | | | | | | | | | | | | 0 | 0 | 0 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | Belgium | | | | | | | | | | | | 0 | 0 | 0 |
| 14 | Bulgaria | | | | | | | | | | | | 0 | 0 | 0 |
| 15 | Finland | | | | | | | | | | | | 0 | 0 | 0 |
| 16 | Hungary | | | | | | | | | | | | 0 | 0 | 0 |
| 17 | the Netherlands | | | | | | | | | | | | 0 | 0 | 0 |
| 18 | Portugal | | | | | | | | | | | | 0 | 0 | 0 |
| 19 | Spain | | | | | | | | | | | | 0 | 0 | 0 |
| 20 | Lithuania | | | | – | | | | | | | | 0 | 1 | -1 |
| 21 | Slovenia | | | | | | | | | | – | | 0 | 1 | -1 |
| 22 | Latvia | | | + | – | | | | | | – | | 1 | 2 | -1 |
| 23 | Sweden | | | – | + | | | – | | | | | 1 | 2 | -1 |
| 24 | France | – | | – | | + | – | – | | + | | | 2 | 4 | -2 |
| 25 | Germany | – | – | | | + | – | | – | + | | – | 2 | 5 | -3 |
| 26 | Greece | | – | | | | | | – | | | – | 0 | 3 | -3 |
| 27 | Italy | – | – | – | | | | | – | | – | – | 0 | 6 | -6 |

Source: Own elaboration.

As the result of combining the quantitative evaluation in the area of economic potential and demographic situation, 17 groups of countries were separated. They were marked with the letters from **A1** to **E4**. Below, each of the groups has been described and its evaluation has been complemented with the information about the development of pension systems, which is included in the subchapter *The conditions of European pension systems operating.*

**Table no. 24**

**The classification of the European Union countries in the area of economic and demographic conditions for pension systems**

| Group | Rank | Country | Economic potential | Demography | Total |
|---|---|---|---|---|---|
| A1 | 1 | Ireland | 2 | 4 | 6 |
| A2 | 2 | Great Britain | 2 | 2 | 4 |
| A3 | 3 | Cyprus | 0 | 4 | 4 |
| | 3 | Slovakia | 0 | 4 | 4 |
| B1 | 5 | Luxembourg | 1 | 1 | 2 |
| B2 | 6 | Lithuania | 2 | -1 | 1 |
| B3 | 7 | Austria | 1 | 0 | 1 |
| B4 | 8 | The Czech Republic | 0 | 1 | 1 |
| C1 | 9 | Latvia | 1 | -1 | 0 |
| C2 | 10 | Malta | -1 | 1 | 0 |
| | 10 | Romania | -1 | 1 | 0 |
| C3 | 12 | Belgium | 0 | 0 | 0 |
| | 12 | Finland | 0 | 0 | 0 |
| | 12 | Hungary | 0 | 0 | 0 |
| | 12 | Spain | 0 | 0 | 0 |
| D1 | 16 | Denmark | -1 | 0 | -1 |
| | 16 | Poland | -1 | 0 | -1 |
| | 16 | Estonia | -1 | 0 | -1 |
| D2 | 19 | Bulgaria | -1 | 0 | -1 |
| | 19 | The Netherlands | -1 | 0 | -1 |
| | 19 | Portugal | -1 | 0 | -1 |
| D3 | 22 | Slovenia | 0 | -1 | -1 |
| | 22 | Sweden | 0 | -1 | -1 |
| E1 | 24 | Germany | 0 | -3 | -3 |
| E2 | 25 | Greece | 0 | -3 | -3 |
| E3 | 26 | France | -1 | -2 | -3 |
| E4 | 27 | Italy | 0 | -6 | -6 |

Source: Own elaboration.

### 3.3.2 Descriptive, qualitative evaluation

**Ireland** was the only member of the group **A1**. That country received the highest quantitative evaluation, i.e. 6 points, and is the leader in the area of economic potential as well as demography. The universal pension system was established in Ireland in 1908 and there is the 2$^{nd}$ pillar but it is not mandatory.

In that country, there are no recommendations to introduce the mandatory 2$^{nd}$ pillar and the economic and demographic situations are not disturbing.

**The United Kingdom** was a member of the group **A2**. High marks in the area of economic potential as well as demographic situation allow the United Kingdom to receive a favourable quantitative evaluation. The universal pension system was introduced in the United Kingdom in 1908 and the 2$^{nd}$ pillar became mandatory in 1961.

The economic and demographic situations are favourable for the future of the British pension system.

In the group **A3** there were two countries – **Cyprus** and **Slovakia**. Both those countries received 0 in a quantitative evaluation in the area of economic potential and 4 points in the area of demography.

In **Cyprus** the universal pension system started operating in 1957 and the 2$^{nd}$ pillar became mandatory in 1980.

The economic situation may be estimated as neutral but the demographic situation is undoubtedly an advantage of that country. Therefore, it is difficult to expect rapid changes in the pension system.

In **Slovakia** the universal pension system was implemented in 1906 and the mandatory funded 2$^{nd}$ pillar was introduced in 2004.

The neutral evaluation in the area of economy and a very favourable one in the area of demography bode well for the future of the pension system in Slovakia. In the current state of affairs, upon the introduction of the 2$^{nd}$ pillar, it is not necessary to implement changes in the pension system.

**Luxembourg** was a member of the group **B1**. That country received a positive evaluation in the area of economic potential as well as demography.

That country is an unquestionable European leader in the area of the GDP *per capita* (PPP). The universal pension system was introduced in Luxembourg in 1911 and the 2nd pillar is of voluntary character.

In a current, very favourable situation it is not recommended to change the present pension system.

**Lithuania** was a member of the group **B2**, which received two positive points in the area of economic potential and one negative point in the area of demography. The difference of life expectancy at birth between genders was the demographic element which was negatively evaluated. The universal pension system was introduced in Lithuania in 1922 and the 2nd pillar in 2004.

With positive elements in the area of economic potential, the influence of a quite specific demographic difficulty should not have a negative impact on the Lithuanian pension system. It is possible, however, to introduce the solution of the NDC type in the 1st pillar like in other Baltic countries.

**Austria** belongs to the group **B3**. A favourable evaluation in the area of economic potential concerns the level of the GDP *per capita* (PPP). Austria belongs to the richest countries in Europe. In the area of demography, there are no positive or negative evaluations. The universal pension system was implemented in Austria in 1906 and the mandatory funded 2nd pillar was implemented in 2003.

It seems that Austria has already made changes in the pension system and in such a wealthy society, where there are no unanimous demographic recommendations, there will be no motivation to change the system.

**The Czech Republic** was a member of the group **B4**. In the area of economic potential there is no positive or negative evaluation. A favourable evaluation of the country is the result of a demographic situation in the area of the percentage of population at working age. The universal pension system came in force in the Czech Republic in 1906 and the 2nd pillar does not exist.

It seems that it is recommended to introduce the 2nd pension pillar in the Czech Republic, but its mandatory character is disputable.

The group **C1** embraces only **Latvia**. The favourable evaluation in the area of economic potential results from the highest rate of economic growth and the negative evaluation in the area of demography is the result of a big difference in life expectancy at birth between genders. The universal pension system was introduced in Latvia in 1922 and the 2nd pillar in 2001.

Latvia is the European leader in the introduction of the solution of the NDC type in the 1st pillar. The clear 2nd pension pillar complements a favourable image of that country. There is no reason for significant changes in the pension system. However, it is very probable that in future Latvia will resign from the mandatory character of the 2nd pillar. In the group **C2** there are two countries – **Malta** and **Romania**. In both cases those countries received 1 negative point in the area of economic potential and 1 positive point in the area of demography.

In case of **Malta** the negative point results from the size of the economy and the positive point in the area of demography is the result of five elements. The universal pension system was introduced in Malta 1956 and there is no 2nd pillar.

The small size of the Maltese economy surely hampers the operating of the funded 1st pillar. However, it is possible to introduce it in the near future provided the accumulated assets may be invested in foreign markets.

**Romania,** in turn, received a negative point for the last position in the classification of the European Union countries in the area of the GDP *per capita* (PPP) and a positive point for one of the shortest life expectancies at birth in Europe, which despite a negative implication, is a favourable factor for pension systems. The universal pension system was introduced in Romania in 1912 and the mandatory 2nd pillar in 2008.

It is difficult to predict the future of Romania. It seems that joining the European Union was a positive stimulus for the Romanian economy. However, common poverty is not a good basis for a positive diagnosis of the condition of the pension system in that country. Romania seems to have created a reasonable framework for a modern pension system, which now has to be filled with favourable contents.

In the group **C3** there were four countries, which could be defined as European average countries – **Belgium**, **Finland**, **Hungary** and **Spain**.

Those countries did not receive any positive or negative points in the area of economic potential or demography.

In **Belgium** the universal pension system has been in force since 1900 and the 2nd pillar is voluntary.

Belgium has a relatively favourable image in European comparisons in the area of economic potential. In the area of demography, low percentage of population at working age may be disturbing. In the current state of affairs in Belgium, there is no motivation to introduce changes in the pension system.

**Finland** was the last country in continental Europe to introduce the universal pension system. It took place in 1937 and in 1962 it was reinforced with the mandatory 2nd pillar.

In the area of economic potential, Finland is in a favourable but not distinguishing position in Europe. The demographic situation in Finland does not raise any reservations in European comparisons either. Therefore, there is no motivation to alter the current pension system in that country either.

**Hungary** introduced the universal pension system in 1928 and the mandatory 2nd pillar in 1998. At that point, Hungary was the European leader in the implementation of the World Bank idea.

In the area of economic potential, the low economic growth rate may be disturbing and in the area of demography – the big difference in life expectancy at birth between genders. Hungary lost the leading position in the area of economic changes in Europe due to the low rate of economic growth. However, the framework for the modern pension system created between 1998 and 1999 should not be subject to system changes in future except for the introduction of the NDC solution in the 1st pillar.

**Spain** implemented the universal pension system in 1919 and the 2nd pillar is of voluntary character in that country.

Spain does not stand out in the area of economic potential and that country has one of the longest life expectancies at birth in Europe and one of the lowest ratios of the population aged 0-14 to the population aged 65+. The lack of system reforms in that country together with the unfavourable demographic situation allows including Spain into the countries, where such changes should take place in the near future.

The group **D1** included **Denmark**, **Poland** and **Estonia**. All those countries received a quantitative evaluation -1, while the area of economic potential was estimated at -1 and the demographic factor received 0, which was the result of partial evaluations.

**Denmark** is the leader in the area of implementing universal pension systems, where such a system came in force in 1891. The 2$^{nd}$ pillar became mandatory in 1964.

In the area of economic potential, Denmark received a negative point for the lowest level of economic growth, because it could lead to its lower position in the classification of the total GDP in the near future. However, apart from that, Denmark has the lowest unemployment rate in the European Union and is one of the wealthiest countries of the Union. Considering demography, Denmark received one negative point due to the low percentage of population at working age and one positive point for the small difference in life expectancy at birth between genders. In a current state of affairs, one should not expect changes in the structure of the Danish pension system.

**Poland** introduced the universal pension system in 1927 and carried out its radical modification and implemented the mandatory 2$^{nd}$ pillar in 1999. In the area of economic potential, Poland received negative points for one of the lowest GDP *per capita* (PPP) in the European Union[5] and for the highest unemployment rate and one positive point for the chance of changing its position in the total GDP classification. In the area of demography, Poland is a leader as far as the number of the unemployed is concerned. However, Poland also has one of the highest percentages of working age population, a favourable ratio of the number of working age population to the number of people at the retirement age, and one of the lowest percentages of people aged 65+. After ordering the economic situation, Poland may count on positive evaluation of the changes in pension system carried out in 1999.

5 The lowest GDP *per capita* (PPP) among countries which joined the European Union before 2007.

**Estonia** introduced the universal pension system in 1924 and the mandatory 2nd pillar in 2002.

Considering its economic potential, Estonia received a negative point for the size of the economy. In the area of demography, Estonia received a positive evaluation for the life expectancy at birth and a negative one for the big difference in life expectancy at birth between genders. Estonia, which for many years has been perceived as the leader of economic changes in the Baltic countries, recently has given way to Latvia and Lithuania. It remained at the fourth position in the European Union in the area of the rate of economic growth. Therefore, there is no pressure in that country to change the current pension system.

The group **D2** covered **Bulgaria**, **the Netherlands** and **Portugal**. Those countries were evaluated at the level of -1, but the area of economic potential was estimated at -1 and the area of demography was given 0 without any partial evaluations.

**Bulgaria** introduced the universal pension system in 1924 and the mandatory 2nd pillar in 2002.

Bulgaria was negatively evaluated for the next to last position in the total GDP classification. In the area of demography, the unfavourable number of population aged 0-14 and the ratio of the population aged 0-14 to the population aged 65+ are disturbing. That country has recently been transforming its economy. The membership in the European Union has a positive influence on the level of Bulgarians' wealth and the adopted system solutions in the area of pensions should be considered sufficient at this stage. It is, however, possible that in future the solution of NDC type in the 1st pillar will be introduced.

**The Netherlands** has introduced the universal pension system in 1901 and the mandatory 2nd pillar in 1949, and was a pioneer of such an introduction in Europe. The Netherlands received a negative point in the area of economic potential for the expected loss of its position in the ranking of the economy size. Despite that, the Netherlands remains in the fourth position among the wealthiest countries of the European Union. The Dutch pension systems of the 2nd pillar constitute the international elite in the area of investments and investment profits. Therefore, there is no need to change the current pension system in that country.

**Portugal** introduced the universal pension system in 1935 and the 2nd pillar is voluntary in that country.

Portugal received a negative point in the area of economic potential for the low rate of economic growth. In the area of demography, only the low percentage of the population at working age may raise doubts. Portugal is one of the countries which will need reforms of the system in the near future.

The group **D3** involves **Slovenia** and **Sweden**. Both countries received the total evaluation at the level of -1. They did not have any negative or positive points in the area of economic potential but they got -1 in the area of demography.

In **Slovenia** the universal pension system was introduced in 1922 and the 2nd pillar implemented in that country in the 21st century is voluntary.

A negative evaluation in the area of demography is the result of the low percentage of young population. However, at the same time, Slovenia occupies a high position in the ranking of the percentage of the working age population. The introduction of the 2nd pension pillar in Slovenia is treated as the example of an ineffective reform of the system and the changes of the system may be carried out only in the area of a mandatory character of the 2nd pillar.

**Sweden** introduced its Scandinavian version of the universal pension system in 1913 and the quasi-mandatory 2nd pillar in 1999.

A negative evaluation in the area of demography results from high life expectancy at birth and from the low percentage of population at working age. A positive evaluation in the area of demography refers to the small difference in life expectancy at birth between genders. Sweden is generally perceived as a European leader in the area of implementation of modern pension solutions. Currently, there is no reason for further system changes.

**Germany** was a member of the group **E1**. That country received a result of 0 in the area of economic potential and -3 in the area of demography.

Germany is a pioneer in the area of introducing the universal pension system in Europe and in the world. The first regulation concerning pensions was created (but not implemented) in that country in 1889. The mandatory 2$^{nd}$ pillar was implemented in 2002.

In the area of economic potential, Germany received a positive evaluation for the size of the economy and a negative evaluation for high unemployment rate. In the area of demography, two positive grades concerned the number of population at working age and the number of young population. Five negative grades referred to the number of people aged 65+, the percentage of population aged 65+, the number of unemployed people, the ratio of the population at working age to that retirement age and the ratio of young population to the population at pensionable age. It seems that the latest changes in the pension system are not sufficient and that the system will be subject to further alterations due to very negative demographic situation.

The group **E2** embraced **Greece**, which did not have either positive or negative evaluations in the area of economic potential and which received three negative points in the area of demographic situation. The universal pension system was introduced in that country in 1934 and the 2$^{nd}$ pillar is voluntary.

Negative evaluations in the area of demography concern the percentage of population aged 65+, the ratio of the people at working age to those at retirement age and the ratio of the number of young people to the number of people at retirement age. With such an unfavourable demographic situation, Greece may soon face the problem of insolvency of the pension system. The reforms of the system seem to be a necessity in that country.

**France** is a member of the group **E3.** That country received altogether three negative points: one negative point for the economic potential and two negative points in the area of demography. In France the universal pension system was introduced in 1910 and the mandatory 2$^{nd}$ pillar in 1961.

In the area of economic potential, negative points concerned the rate of economic growth and the possibility of the lower position in the ranking of total GDP. France received a positive point for the size of the economy. In the area of demography, France received negative points in the area of high population number aged 65+, high level of life expectancy at birth, and the number of unemployed people and the low percentage of population at working age. Positive point in the area demography concerned the number of people at working age and the number of young people. The lack of system reforms in France in the wake of the economic problems and unfavourable demographic situation makes this country one of the states that needs reforms of the system most.

**Italy** belonged to the group **E4**. That country did not receive either negative or positive evaluations in the area of economic potential but it got six negative marks in the area of demography. The universal pension system was introduced in Italy in 1919 and the $2^{nd}$ pillar started operating in 2007.

Despite the lack of negative points in the area of economic potential, the low rate of the GDP growth is disturbing. Demography is the real Achilles' heel for Italy, where negative points were received for the number of people aged 65+, the percentage of population aged 65+, life expectancy at birth, the ratio of the population at working age to the population at retirement age, the percentage of young population, and the ratio of percentage of young population to the percentage of people at retirement age. With such a big demographic burden, the recent reforms may occur to be insufficient and late. With the low dynamics of economic growth it may even mean the bankruptcy of the Italian pension system.

### 3.3.3 The effectiveness of implementing the Open Method of Co-ordination

Set up at the Lisbon European Council of March 2000, the open method of co-ordination is differently evaluated from different points of view. For the followers of harmonization, focused on the idea of social Europe, it is insufficient instrument of unification. They prefer hard legislation, such as directives, to soft instruments such as the OMC. For the opponents of strengthening of the Union's competences in area of pension systems, the OMC goes too far. In their view, the soft present-day co-ordination will evolve into new 'Maastricht criteria' in the area of pension systems in the future[6].

From our point of view, the most important is to analyze the effectiveness of implementing the open method of co-ordination. The analysis is conducted in the four steps: 1) the common objectives, 2) the common indicators, 3) the national strategic reports, and 4) the evaluating of the strategies.

**The first step** in our analyses[7] was the phase of establishing **the common objectives** for Member States.

Those aims were formulated at the Götheborg summit in 2001, which should be implemented by pension systems in the long-term perspective[8]. These were:

- adequacy of pensions – to safeguard the capacity of pension systems to meet their social aims of providing safe and adequate incomes to retired persons,
- financial sustainability of public and private pension schemes – to ensure the financial sustainability of pension systems, so that the future impact of ageing does not jeopardise the long-term sustainability of public finances,
- modernisation of pension systems in response to changing needs of society and individuals – to enhance the ability of pension systems to respond to the changing needs of society and individuals.

Setting of these aims was the basic and indispensable element of the implementation of the OMC in the area of pensions.

The accomplishment of that phase can be evaluated favourably as the objectives were formulated and announced to the Member States within a short period of time.

6 Żukowski M. (2006), pp. 50-51.
7 The analysis is prepared following the concept of Rutkowska. Cf.: Rutkowska Z. (2008).
8 *Supporting National Strategies for Safe and Sustainable Pensions through an Integrated Approach* (2001).

**The second step** of our analysis is the phase of preparing a set of **common indicators**, as a measure of the level of achieving the designated aims.

In the Council of the European Union's Report of 2001[9], the Economic Policy Committee (EPC) was obliged to develop the indicators for the long-term financial sustainability of pension systems and the Social Protection Committee (SPC) was obliged to develop the indicators for the adequacy and adaptability of pension systems. In the same year the Economic Policy Committee developed possible four indicators of the sustainability of public finances, which were[10]:

- extrapolating the levels of the budget balance and government debt,
- the difference between the 'required' and projected primary surplus,
- calculation of the financing (tax) gap considering the Stability and Growth Pact until 2050,
- the 'traditional' financial (tax) gap – suggested by the Dutch authorities;

and the Social Protection Committee agreed on the following indicators of Social Exclusion[11]:

ten **Primary Indicators:**

- low income rate after transfers with low-income threshold set at 60% of median income (with breakdowns by gender, age, most frequent activity status, household type and tenure status; as illustrative examples, the values for typical households),
- distribution of income (income quintile ratio),
- persistence of low income,

9 *Quality and viability of pensions – Joint report on objectives and working methods in the area of pensions* (2001), p. 10.

10 *Budgetary challenges posed by ageing populations: the impact on public spending on pensions, health and long-term care for the elderly and possible indicators of the long-term sustainability for public finances* (2001), pp. 105-108.

11 *Social Protection Committee Report on Indicators in the field of poverty and social exclusion* (2001), pp. 3-4.

- median low income gap,
- regional cohesion,
- long term unemployment rate,
- people living in jobless households,
- early school leavers not in further education or training,
- life expectancy at birth,
- self-perceived health status,

and eight **Secondary Indicators:**

- dispersion around the 60% median low income threshold,
- low income rate anchored at a point in time,
- low income rate before transfers,
- distribution of income (Gini co-efficient),
- persistence of low income (based on 50% of median income),
- long term unemployment share,
- very long term unemployment rate,
- persons with low education.

Also that phase can be evaluated favourably as the indicators were straightforwardly formulated and announced fast to the Member States.

**The third step** of our analysis is the phase of preparing **the national strategic reports (NSRs)**. That stage has the permanent character and began in 2002. In the summer of that year, the 15 EU Member Countries prepared the first edition of these reports. The reports contained the diagnoses of the crucial challenges, information on past and prospective reforms, as well as the data to consider average- and long-term effects of present policies. During that stage the common objectives were transferred into the national programmes of the social-economic policy. At the same time, in November 2002, the European Commission employed the German company Gesellschaftfür Versicherungswissenschaftund–gestaltunge.V. (GVG) to submit a report[12] on the social protection systems in the 13 applicant countries[13]. In mid-2005,

[12] *Study on the Social Protection Systems in the 13 Applicant Countries: Synthesis Report* (2002).

[13] Included also Turkey.

the new Member States presented their strategic reports, while the 'old' ones submitted their updates for the period of 2002-2005[14], and they reported the implementation of designated aims in the three years period.

Also that phase can be evaluated favourably as in the presented reports particular countries analyzed their pension policy considering the appointed aims and pointed at corrections which are necessary to achieve those aims. In these reports particular countries shared their own positive and negative experience.

**The fourth step** of our analysis is the phase of **evaluating the strategies**, which is prepared jointly by the Commission and Council of the European Union. Also that stage has the permanent character and begun in March 2003 by the joint report of the Commission and the Council[15]. The evaluation of the strategies was prepared in that document in the three areas: 1) adequacy, 2) financial sustainability of pension systems, and 3) modernisation.

In the area of adequacy considering three objectives:

- preventing social exclusion,
- enabling people to maintain living standards,
- promoting solidarity.

In the area of financial sustainability of pension systems considering five objectives:

- raising employment levels,
- extending working lives,
- making pension systems sustainable in the context of sound public finances,
- adjusting benefits and contributions in a balanced way
- ensuring that private pension provision is adequate and financially sound.

[14] http://ec.europa.eu/employment_social/spsi/adequacy_sustainability_en.htm, accessed 6 March 2008.

[15] *Adequate and Sustainable Pensions: Joint Report by the Commission and the Council* (2003).

And in the area of modernisation – responding to changing needs considering three objectives:

- adapting to more flexible employment and career patterns,
- meeting the aspirations for greater equality of women and men,
- demonstrating the ability of pension systems to meet the challenges.

During that phase, the indicators and methods of their achievement were compared, and also the recommendations for particular countries were created. In conclusion, the authors of the Report stated that all Member States had started their reform processes and a number of Member States had implemented major, a few even radical, reforms during the 1990s. However, most Member States see the pension reform as a continuous process rather than a one-off, discrete event. The authors of the Report also stated that applicant countries could be invited to prepare their own national strategy reports based on the 11 common objectives and 15 Member States' updates to the strategy reports could be submitted.

In that area, apart from that main document, the other European recommendations arose in the same time. For example, Wim Kok's Report[16] from 2003 recommended to exploit the new countries' experience in pensions reforms in the Lisbon strategy.

In 2005, the Commission proposed to make the EU level co-ordination in the area of social protection more effective by streamlining the OMCs on pensions, social inclusion and healthcare and long-term care as of 2006. It aims to create a stronger, more visible OMC with a highlighted focus on the modernisation of policies and policy implementation and which will interact positively with the revised Lisbon strategy, while simplifying reporting and expanding opportunities for policy exchange[17].

In August 2006, on the bases of the national reports of 2005, the European Commission published the second synthesis report on social security in the European Union, with special emphasis on pensions[18]. That Report was

16 *Enlarging the European Union: Achievements and Challenges* (2003), p. 44.
17 http://ec.europa.eu/employment_social/spsi/common_objectives_en.htm, accessed 22 June 2008.
18 *Adequate and Sustainable Pensions: Synthesis Report 2006* (2006).

prepared in the same configuration as the 2003 Report with separation of the 11 common objectives. The chosen solutions in the particular objectives, mentioned at that Report, are presented in **Table no. 25**.

**Table no. 25**

**The chosen solutions in the particular objectives of the Open Method of Co-ordination**

| No. of objective | Benchmark countries | Preferred solution |
|---|---|---|
| 1 – Preventing social exclusion | the United Kingdom | \`rewards' people for their private saving |
| 2 – Enabling people to maintain living standards | Sweden and Poland | building a strong link between contributions and benefits by notional defined contribution schemes |
| 3 – Promoting solidarity | Germany | third-pillar \`Riester-contracts' could be ways in which redistributive elements in supplementary pension schemes can be introduced |
| 4 – Raise employment rates | Denmark, Germany and Sweden | to improve the health of employees throughout their careers |
| 5 – Extend working lives | the United Kingdom | unlimited deferral and an incremental rate of 10.4% for each full year of postponed retirement |
| 6 – Making pension systems sustainable in a context of sound public finances | Estonia, Latvia, Sweden and the United Kingdom | the indexation of pensions to prices (or close to prices) |
| 7 – Adjust benefits and contributions in a balanced way | Germany<br>Sweden | the sustainability factor<br>an automatic balancing mechanism |
| 8 – Ensure adequate and financially sound private pensions | Poland | ranking of all pension funds' by the system of monitoring their investment efficiency |
| 9 – Adapt to more flexible employment and career patterns | Greece | a regulation concerning equal treatment of part-time and full-time workers in IKA-ETAM |
| 10 – Meet the aspirations for greater equality between women and men | Austria | the Family Equalisation Fund pays contributions to the second-pillar \`severance pay' funds |

| | | |
|---|---|---|
| 11 – Demonstrate the ability of pension systems to meet the challenges | Austria | an Expert Committee triennially monitoring the development of pension provisions from several perspectives |

Source: Own elaboration based on *Adequate and sustainable pensions: Synthesis report 2006* (2006).

In conclusion, the authors of the Report stated that the second round of the NSR confirms that the three main objectives of pensions adequacy, sustainability and modernisation were appropriate to guide the reform strategies necessary to address the pension challenge in Europe. The two most important conclusions of that Report were: 1) pensions constitute a major part of public expenditure in almost all countries, and 2) pension systems and labour market performance are closely connected.

Also that phase can be evaluated favourably as the creation of two complex reports was succeeded and the second one took into consideration 10 new Member States.

Looking back from the eight years' perspective at the performing of the OMC in the area of pensions, we can observe, apart from undoubted success, as two complex pension reports, the doubtful elements, which can be criticized[19].

The first doubt is the answer to the question what is the aim of convergence – results or just politics? The second question is what is the sense of the openness? Is it an instrument of creating the Social Europe or avoiding new social regulations? The OMC is also taken as a potential common method threat and a threat for subsidiary. The OMC is commonly criticized for the weakness of benchmarking and peer review as the incentives for the real shaping of the Member States politics. In that status quo, the postulate arises of intensification of the peer pressure on the Member States by naming, shaming and faming.

Generally, we can state that apart from undoubted advantages of implementation of the OMC in the pensions' area, many doubts exist in the context of efficiency of performing that method in the future.

[19] According to Rutkowska. Cf.: Rutkowska Z. (2008).

*Resumé*

It seems that such countries as Austria, Belgium, Cyprus, Denmark, Finland, the Netherlands, Ireland, Luxembourg and the United Kingdom should ensure the financial stability of their pension systems and adequate pensions. Estonia, Latvia, Poland, Sweden and Hungary belong to the group of leaders in the area of implementation of modern solutions which would ensure in future the stability and adequacy of pension systems. Despite the implementation of system reforms, Romania, Slovenia and Italy do not constitute good examples of effective working. Bulgaria, Lithuania and Slovakia are halfway through to the modernity in the area of pensions. Radical system changes should be carried out in the Czech Republic and in Malta. France, Greece, Spain, Germany and Portugal have to face the biggest challenges in the area of changes in the applied solutions. Those countries should adopt the solution defined by Góra[20], as a modern uniform pension system. That system is characterized by moving away from financing through taxes, keeping the public management of the part of the system in the transition period and investing the part of assets in the financed public debt.

[20] Cf.: Góra M. (2003), p. 135.

# CONCLUSION

The research objective of cognitive character of this research work was to present historic and current developments of pension systems in the European Union countries. The objective of the applicational character was to isolate from these various systems such solutions that could be used in benchmarking comparison. Have these aims been achieved?

The book starts with an introduction which presents briefly pension-related issues and historic development of pension concepts in the world and Europe, followed by general information about each European Union country, with emphasis on their history. Then their pension systems in the past and at present are described, with challenges that they are likely to face in future. The next part of the book comprises the inventory of all data concerning each country's economic potential and demography, which are the factors significantly influencing pension systems. The next step is to provide a complete summary of information on development of pension systems in all the countries, accompanied by the author's commentary. Last but not least, all the data provided is recapitulated and evaluated quantitatively and qualitatively, which allowed the author to classify the European Union countries into five basic groups. The summary is concluded with reference to the distinctive elements of each pension system.

To sum up, it is justified to claim that the goals defined at the beginning, both of the cognitive and application nature, have been achieved. Additionally, classification of the European Union pension systems has been proposed, however, with the author's being fully aware of its deficiency. The elements with reference to which the systems are compared have been selected in an arbitrary way and may need thorough analysis as to the importance of each factor in the pension system. While being conscious of the fact that not every attempt at classification is successful and widely acknowledged, it is vital to remember that scientific trial and error is a foundation of scientific progress. This book is such a 'trial' and its rightness is to be evaluated by the Readers.

Pension systems in the EU countries have been developing since the last decade of the 19th c. They emerged at the contact point of well-developed capitalism and increasingly popular socialist tendencies. In politics and economy, classical liberalism was being replaced by the concept based on statism stemming from German bureaucracy. The Germans' belief in infallibility of the state organization led to submitting more and more areas of public sensitivity to state jurisdiction. Accidents at work, loss of health or employment, death of a close person, or old age are unwanted events, against which we can be insured. From a liberal point of view, buying insurance is a matter of personal worry and a private problem. The concept based on statism assumes that without obligatory insurance people will fail to provide for their own safety, thus taking some of the money they earn to finance the system of mandatory social insurance is morally justified. On this philosophical conviction public pension insurance systems are based in European countries.

Another problem was the alternative to finance pensions from general taxes or special pension insurance contributions. The historical development shows that the latter prevailed. Paying pension insurance contributions is characterised by a long-term perspective, which starts with the moment of joining the system until it is consumed. A young person starts saving for his or her pension at the age of approximately 20, and uses the accumulated resources after he or she reaches the age of 60. On one hand it creates the opportunity to apply instruments of financial engineering, but on the other, it is tempting for politicians to use the funds to deal with current public needs. This temptation led to governments' taking control of pension contributions accumulated by people in return for a vague promise of paying pensions in future. The necessity of fulfilling this promise has always meant and still means paying pension benefits. And after the accumulated contributions have been used for other purposes by politicians, pensions could only be financed from current contributions paid by new participants in the system. This pattern is reminiscent of Charles Ponzi's idea, for applying which in the United States he was imprisoned in 1920 for five years. The scheme works well if numerous participants join it, and it fails if there are too few new-comers. And the demographic situation in Europe at the end of the 20th c. meant too few young people joining the system. There are two possible solutions to this situation: 1) raising the amount of contributions, and 2) raising the age of retirement. The former has been used in many a European country, yet contributions cannot be raised infinitely as it results in high labour costs and loss of competitiveness of the economy. Thus, the latter seems a last resort, which is to increase retirement age, which is currently being introduced in many European countries. The EU documents encourage to promote long employment and flexible, thus late, retirement. Yet, retirement age cannot be raised infinitely either. The answer to the question what to do about the future of pension schemes is not an easy one. The neo-liberal fraction in economics advocates returning to the beginnings, namely leave pension insurance to personal prudence and, what follows, abolish mandatory pension insurance system. Is this the future of pension schemes in the European Union? Only life can bring the answer, and it is the duty of researchers to observe and record the changes in this area.

Last but not least, I wish to mention my personal satisfaction which I derive from having effectively gathered the knowledge on the pension systems of 27 European Union countries in one volume. The hitherto works have concentrated on either 'the old European Union countries' or the 'new ones', still bearing in mind the iron curtain, which had once been drawn from Szczecin to Triest by Churchill. This book unites these two parts of Europe, with all their cultural and civilizational mosaics. Publishing a book in English by a Pole in Lithuania is an embodiment of changes that we are witnessing in the Europe of today.

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# A note on the author

**Jarosław POTERAJ**, born 4 September 1963 in Łomża, Poland, Master of Science and Engineer of Food Technology from the Academy of Agriculture and Technology in Olsztyn (present University of Warmia and Mazury) in 1987, Ph.D. in Economic Sciences in the Field of Economics from the Catholic University of Lublin in 2002. Immediately after graduation, between 1987 and 1993, he worked in food industry, at first taking various managerial positions in production and logistics, and then in the official organ of the food products quality control in the Central Inspectorate of Standardization at the Ministry for International Economic Cooperation, where he was trained as a civil servant and qualified as a standardization inspector. In 1993-2002, he was working in banking. Between 1993 and 1997, he gained experience working in different areas of banking in Bank Polska Kasa Opieki SA Łomża Branch in the Departments of Corporate Loan Services, Business Customer Service, International Settlement, Electronic Settlement Systems. In 1995 he finished post-graduate studies in Money and Banking at the Faculty of Economic Sciences of the University of Warsaw. In 1998, he was the proxy of the Bank Polska Kasa Opieki SA. In 1999-2002, in the Bank Pocztowy SA, where he was the plenipotentiary of the Board of Directors responsible for organizing a new branch in Białystok. Starting from scratch, he created No.1 Branch of the Bank Pocztowy SA in Łomża, and in the last period of his work for this bank, he was holding the post of the Branch Manager. He participated in a few dozen trainings on banking, finance and management. In 1998-2002 he studied economics at the Catholic University of Lublin, where, in the Institute of Economics at the Faculty of Social Sciences, he defended his doctoral dissertation entitled: *Consolidation Processes of Polish Financial Institutions*, which rendered him a title of the Ph.D. in Economic Sciences in the Field of Economics. From October 2002 to September 2003, the Reader at Bogdan Jański Academy of Management and Entrepreneurship in Łomża, where he delivered lectures on: Financial Markets and Institutions, Human Resources Management, Strategic Management, Finance Management, and Management of Assets and Liabilities of Commercial Banks. He also conducted diploma seminars on capital groups in Polish financial institutions. In 2003 and 2004, he was Finance Manager in the Polish Financial Agencies Ltd in Warsaw. Since 2005, the Lecturer at the State School of Computer Science and Business Administration, where he works for the Institute of Management. Here he lectures on International Financial Relations, Finance (in Polish and in English), and Business Finance Management (in Polish and in English), as well as conducts diploma seminars. In 2006 he was on research and scientific placement at Italian universities: *Università Cattolica del Sacro Coure* and *Università Commerciale Luigi Bocconi*. He wrote two books in Polish: *Polish Financial Institutions. Market Creation and Consolidation Processes* (Polish: *Polskie instytucje finansowe. Kreacja rynków i procesy konsolidacyjne*) (2002) and *Consolidation Processes. Raiders & Targets in Polish Financial Institutions* (Polish: *Procesy konsolidacyjne. Raiders & Targets w polskich instytucjach finansowych*) (2004), as well as numerous articles on banking management, mergers and take-overs in financial institutions, pension schemes, and many works with practical applications in the economy. In December 2006 he presented the concept of his Assistant Professor Dissertation with the working title: *Conditions of Investment in Public Pension Societies in Poland.*

The Head of the Chapter of the Narwiańska Foundation and a member of the Waga Brothers' Scientific Association of Łomża.

He lives and works in Łomża. He is married with Katarzyna, who works as an English teacher. They have five children.